

BUSINESS WEEK

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YEAR
AGO



In business, forecasting can be a science (Special Report, page 90).

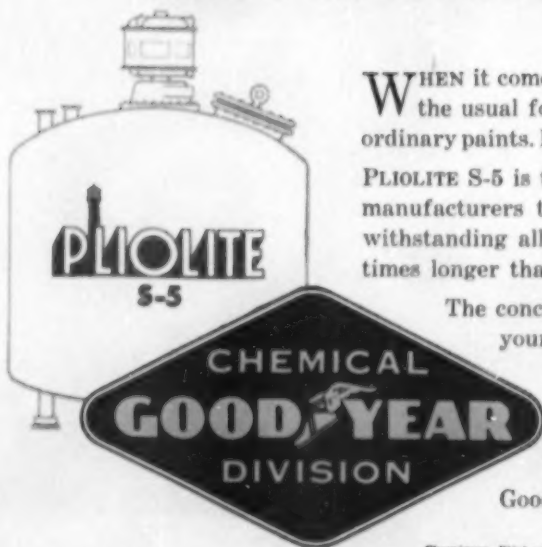
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SEPT. 24, 1955

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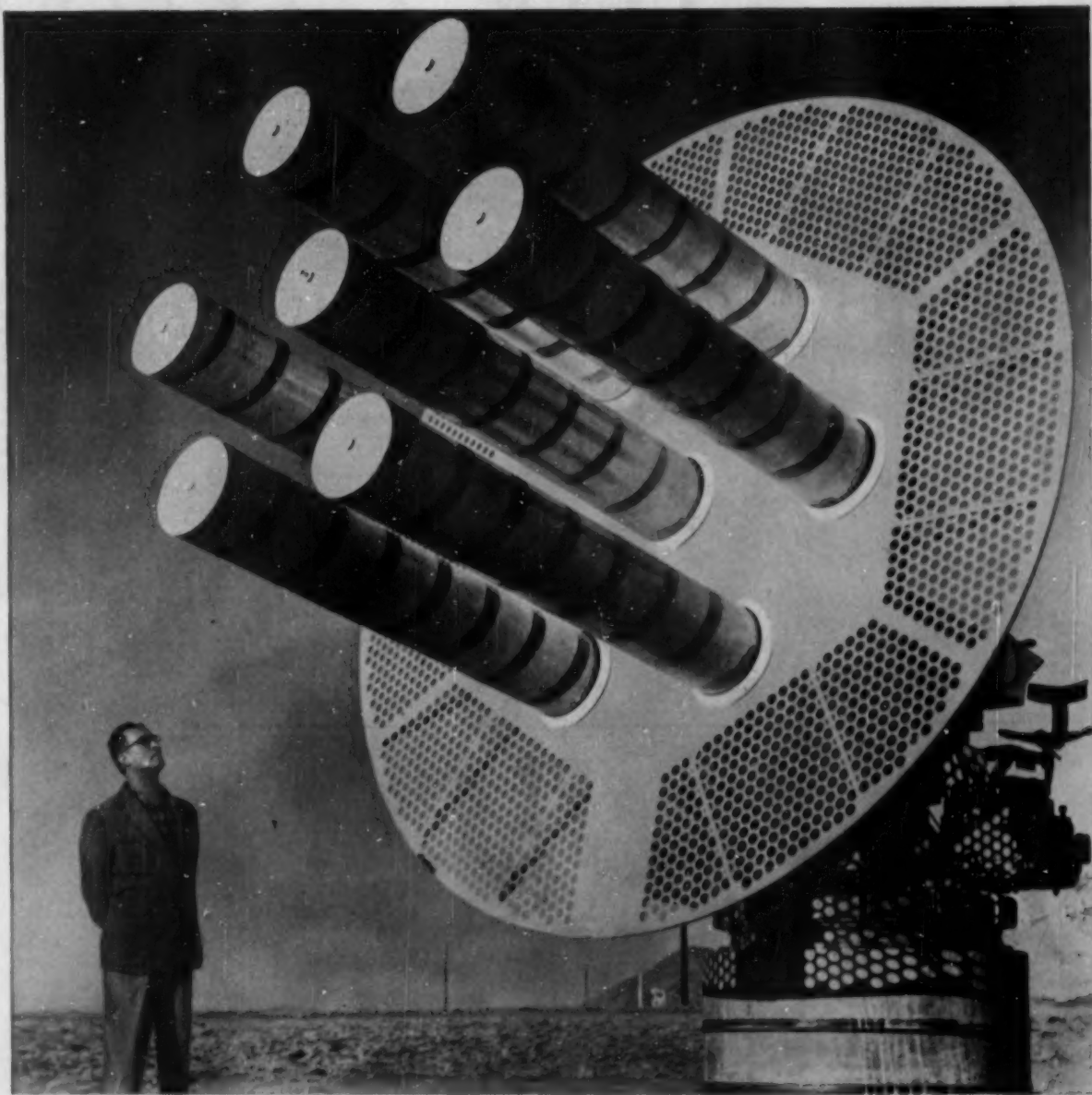
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It's an instrument designed by the Sandia Corporation, a Bell System subsidiary in New Mexico. There Western Electric and Bell

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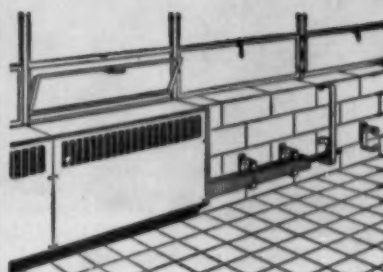
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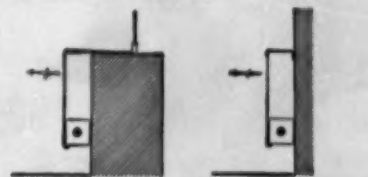
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GENERAL ELECTRIC

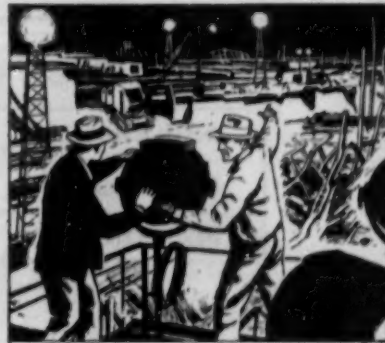
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READERS REPORT

Forging Ahead

Dear Sir:

Your special report is quite interesting and informative [BW—Aug. 13'55,p78]. However, I call your attention to an apparent error in the statement on page 81 concerning the furniture industry in North Carolina, which reads: "North Carolina has strengthened its hold on No. 1 textile perch and has a strong chance to pass New York and become tops in furniture."

North Carolina is the leading state in household furniture production and New York is the second state, according to Bureau of the Census estimate for 1953 as shown in Series: M54A-03 (1954 figures not yet available). . . .

Your special attention is invited to the fact that whereas the value of North Carolina's production increased from 1952 to 1953, New York's production declined. . . .

Also North Carolina and Virginia occupy first and second places in the value of wood household furniture, these two states accounting in 1953 for 27.6% of the total production. In the production of bedroom and dining room furniture, North Carolina and Virginia accounted for 50% and 41.9% of the total in 1953.

These statistics do not fully disclose the expansion of the furniture industry in the southern area. Many new plants are now under construction and the capacity of many of the existing plants is being increased through additions and new equipment. . . .

J. T. RYAN

EXECUTIVE VICE-PRESIDENT
SOUTHERN FURNITURE MANUFACTURERS' ASSN.
HIGH POINT, N. C.

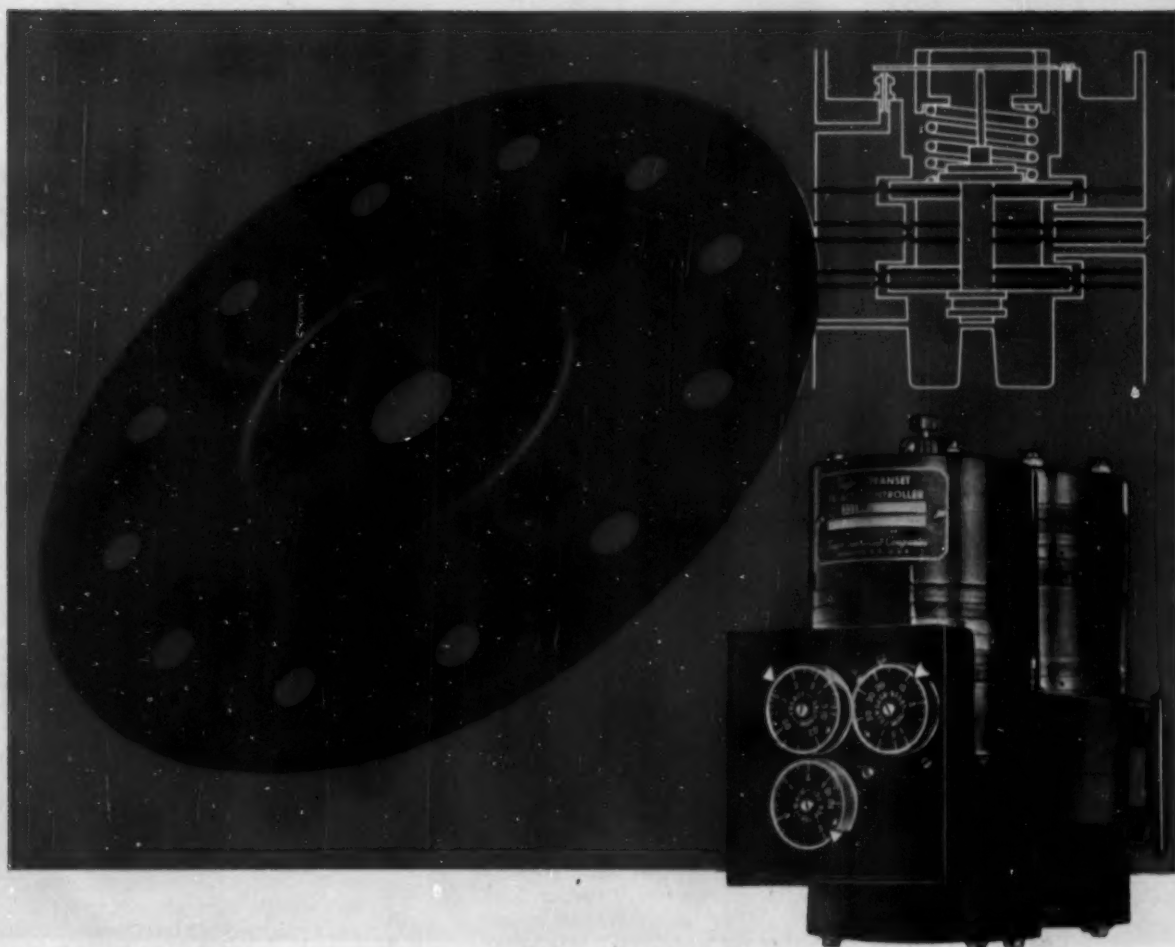
• A recheck of government statistics proves Reader Ryan is correct.

Weathering the Storm

Dear Sir:

May I congratulate you on an article you printed on July 5, 1952? No, this letter is not delayed, but actually a very up-to-the-minute recognition of your "word to the wise" in 1952. I am referring to an article that appeared in that issue entitled *Sharing the Risk on Credit Losses* [BW—Jul.5'52,p58].

You will find the first six paragraphs are particularly applicable to the "Black Friday" situation that



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cleaning schedules for most effectual care . . . and to make periodic check-ups. For demonstration, consultation, or literature, phone or write nearest Finnell Branch or Finnell System, Inc., 3809 East Street, Elkhart, Indiana. Branch Offices in all principal cities of the United States and Canada.



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Originators of
Power Scrubbing and Polishing Machines



BRANCHES
IN ALL
PRINCIPAL
CITIES

developed as a result of hurricanes "Connie" and "Diane." You mentioned the A. B. C. Company which was in good financial condition, but was wondering what would happen if several of its old customers, who were located in a city that had occasional floods, should be hit by a common catastrophe. A. B. C. Company realized that it would, itself, be in serious trouble as a result. The A. B. C. Company overcame this exposure by the purchase of credit insurance.

My purpose in writing this letter is to call your attention to your own foresight in devoting two pages to the explanation of credit insurance back in 1952. Your article The Price of Diane: Black Friday for the Northeast [BW—Aug. 27'55, p26] provides graphic illustration of what can happen unexpectedly to seemingly healthy businesses. Certainly no one was prepared for a catastrophe like this, nor could any supplier have a credit executive with the ability to foresee the terrific losses that might develop overnight.

In your article on the hurricane damage, you pose one question that must be haunting many credit executives today: How many companies will ever re-open?

. . . Even in those cases where the distressed debtors will eventually pay their accounts, the creditors with the foresight to have credit insurance will probably have received most of their cash and have turned it over several times as working capital, instead of being, themselves, financially distressed or forced to borrow while awaiting payment.

OWEN G. HYDE

AUSTIN W. HYDE INSURANCE AGENCY
DETROIT, MICH.

Strictly Speaking

Dear Sir:

Under Business Outlook [BW—Aug. 27'55, p18] there occurs the statement: "One thing supporting the market for new homes has been more rapid family formation than had been figured a year ago. Probably the annual rate never did get down to the 600,000 a year then reported; in any event, it has returned to about the 900,000 level."

From whatever figures we have been able to obtain from the Dept. of Labor, the family formation is around 500,000 per annum although household formation, i.e., undoubling, moving of children out of the parental household prior to marriage, may be running at a rate close to 1-million. Which do

"Gentlemen, we're running this business like a popcorn stand!"



When a popcorn vendor takes inventory, he checks the salt and butter and makes a rough guess at how much corn's in the popper. Guesswork likewise establishes the work-in-process figure in many a company's monthly statement.

Hence this board chairman's uneasiness. He has only an *estimate* on the value of goods going through the shop. He doesn't know how much has been *actually invested* in them — collectively or by type of product. Under existing procedures, he can't find out for weeks, till a detailed physical inventory is taken.

As it happened, one of the directors knew about Keysort punched-card accounting. He gave us a plug.

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Those who know...use the B&O!

you refer to and how does it sustain your argument?

ARMAND G. ERPF

NEW YORK, N. Y.

• "Family formation" and "household formation" are commonly used interchangeably to mean households of whatever type. We were referring, strictly speaking, to household formation.

We wanted to point out that last year's figures seemed to have understated the rate of growth and this year's seemed to restore a more credible level.

Easy Living

Dear Sir:

Our newspaper plant was air-conditioned throughout, this year, so I quite agree with the statement by Reader Russakoff that "air-cooling is necessary for optimum working conditions" in the Southern states [BW—Sep. 3 '55, p8—Readers Report].

However, I came originally out of the Middle West, have had experience as a worker in New York City, and also as a student in New England, New York, Chicago, and a number of smaller Middle Western cities in which I have had experience certainly call for air-cooling in the summer for optimum working conditions also. They call for much more heating in winter for similar optimum conditions. (We put on some heat here in wintertime, but it costs a lot less and we don't have any difficulties about snow removal.)

One reason for industrial growth in the Southeast is that a lot of people originally from New England, the Mid-Atlantic states, and the Middle West find they prefer life in the South.

TALBOT PATRICK

EDITOR & PUBLISHER
EVENING HERALD
ROCK HILL, S. C.

Not From Books

Dear Sir:

One of the most provocative items I've read in *BUSINESS WEEK*—and I've been an avid reader for a long, long time—was a letter from Reader Rodgers of the General Electric Company [BW—Aug. 6 '55, p8—Readers Report].

He complains, as have many others, that graduates of engineering schools are not given adequate consideration in the selection of executive personnel. There is reason to believe that graduates of some of our finest schools of business



look what phosphates

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How an appraisal drove the "ghosts" out of the plant

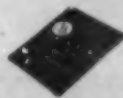
When we analyzed the property records of a manufacturing company^{*}, the verification of physical assets disclosed that many items of equipment, still on the books, had long since been disposed of. They were the assets of yesteryear which were disclosed as the "ghosts" of today, distorting property records.

American Appraisal Service is a valuable tool in property control, providing management with up-to-date authoritative information about the existence, cost, or value of assets and the adequacy of depreciation provisions. It is based on The American Appraisal Company's over-half-century experience as the leader in the field of valuation for purposes of insurance, accounting, property control and corporate financing.

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^{*}Actual case from our files

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may have the same complaints.

These folks are trained to think logically and clearly. Theoretically they could be the finest executives. Generally, they often fail as executives or leaders. Somewhere down the line their logic deserts them.

Anyone who has given much thought to the qualities that make a successful executive, recognizes that the characteristics which set a leader and a top flight executive are qualities of temperament, character and emotional adaptability. How can it be that top flight educators have overlooked this facet of personality development?

Almost every employer is eagerly seeking persons with the potential for leadership and executive capacity. They attend seminars and meetings, and even engage management consultants to help them find men and women with executive potentials.

Eventually, the frustrated seeker of executive talent concludes that the qualities of character he seeks are developed in the home and in the kindergarten. The advanced schools and professional colleges fill the minds of their students with a variety of facts, and perhaps the fundamentals of logical thinking. Rarely do they develop leaders of men. . . .

Have these educators been aware of industry's frantic search for executive material? Have they sought to ascertain what qualities of character are sought by industry? Probably not, for temperament and character are not learned from textbooks. Industrial leaders are developed in the home, in the kindergarten, and in the church . . . but rarely in professional schools.

The professors I have known have welcomed with open arms the students who arrived at college with the qualities of leadership so sought after by industry. Rarely do they help the weaker students develop these qualities.

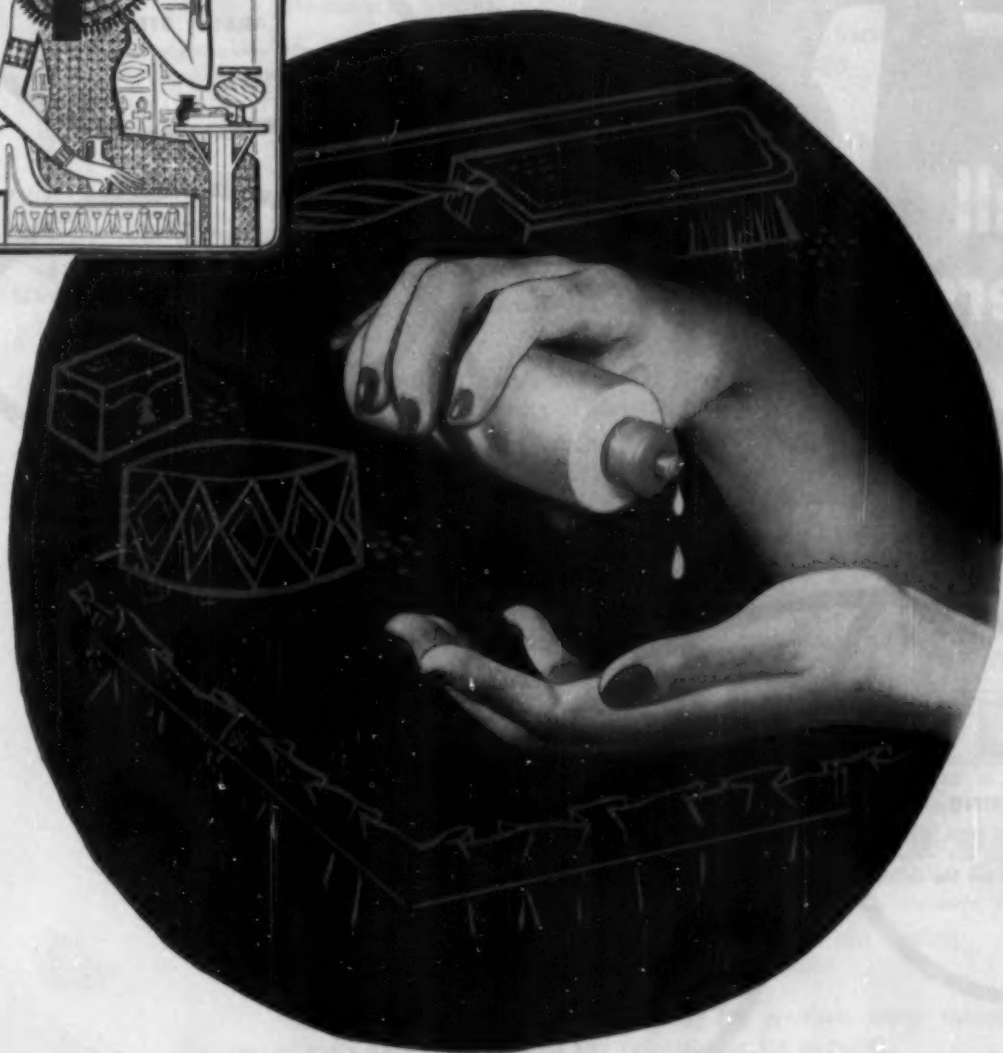
I'd like to suggest to Reader Rodgers, and to all those who are desperately seeking leadership qualities, that they encourage professional schools to devote their major efforts to the development of character, and leadership, and the emotional qualities that provide executive temperaments and attitudes.

After all, most of the data required for professional activities can be obtained from the large variety of handbooks available.

CHESTER E. GOTTSCHALK
PLANT ENGINEER
RUST CRAFT PUBLISHERS
BOSTON, MASS.



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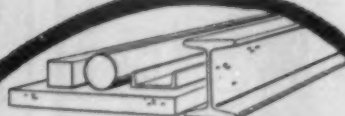
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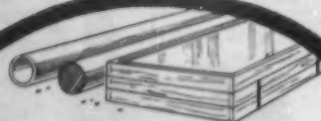
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EMULSIFIERS, DETERGENTS
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**call
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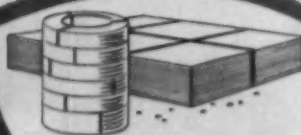
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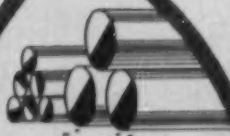
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BUSINESS OUTLOOK

BUSINESS WEEK
SEPT. 24, 1955



Prices are breaking away from the straight line the averages had been tracing for so long a time.

Late-summer firmness marks processed foods and some farm products.

But, more to the point, raw materials and purchased parts have pushed to new highs. Manufacturers are feeling this increasingly.

Plentiful supplies of meat in the autumn season of heavy slaughter will help hold down food prices until early next year.

However, consumers will see more and more rising price tags on manufactured goods in the next few months. This will be particularly true for things made of metals, reflecting both wages and material costs.

A creeping rise in the cost-of-living index thus seems certain.

Higher prices for metals and metal products, following the summer's wage increases, now have seeped through to all manufacturing levels.

The broad, slow-moving wholesale average of prices outside the area of foods and farm products has set a new high. The September figure will be close to 118 (1947-49=100), half a point above the Korea peak.

This could be foreseen as far back as last spring (BW—May 7'55, p17).

Ample foods and a levelling out in rents may be enough to prevent a new high for the cost of living this year. But don't count on it.

The Consumer Price Index is less than a point below the peak recorded late in 1953. And a lot of things you and I buy are pointing higher.

Many advances have been posted, either at the factory level or at retail, for consumer durables such as autos, TV, and big appliances.

Some of the boosts look a little tentative, as though to test the market. And there's always the question if they can stand the competition of the cut-raters (such as the discount houses in appliances).

A lot of the boosts will stick, though, and others are coming.

Small electrical housewares are among the products where manufacturers' costs have risen without any reflection so far at retail.

Leading producers are avoiding markups now that might cripple Christmas sales—by far the biggest volume season. Then, too, such housewares are specialties with the discount houses, so buyers are price-conscious.

Nevertheless, 5% to 7% boosts are expected in the trade soon after Christmas. Manufacturers say they won't be able to hold off longer.

List prices, of course, are only the level from which you dick.

Thus nobody knows yet just what to make of markups that have come along on such varied items as television, kitchen ranges and cabinets, refrigerators, and laundry equipment. Or the boosts only now beginning on 1956 autos (page 32).

How big will markups be after the "deals"? Or how much will the consumer feel them—spread over 12 to 36 months on installments?

BUSINESS OUTLOOK (Continued)

BUSINESS WEEK

SEPT. 24, 1955

Manufacturers themselves have the trade somewhat confused over just what to expect in the field of pricing.

For example, on "white" goods General Electric has replaced nationwide with regional lists (set by distributors with an eye to local conditions). But GE, along with makers such as Sunbeam and Toastmaster, continue to fair-trade small appliances—and to police adherence, too.

Meanwhile, Westinghouse has abandoned fair trade on small appliances.

Department stores and medium-size independent retailers of appliances have, for the most part, looked favorably on fair trade. They like to promote, and be identified with, the fair-traded items.

They face cutting, of course, on two sides: (1) the big-volume discount house, and (2) the family shop, which is hard to police.

—•—

Auto prices won't meet the real test until next spring—when the new driving season puts demand to the test (and long after the scars of the 1955 selling season have healed).

Answers to two questions, in particular, are required:

- How many 1956 customers actually were sold during the 1955 race?
- How much demand will be created by relatively slight model changes?

Auto makers doubtless will reduce "suggested" retail prices—or cut factory prices so as to give dealers more leeway—if resistance appears.

Even so, many observers doubt that the industry in 1956 can come within a million of the 7¼-million new cars it will apparently make in 1955. But, interestingly enough, even a 15% drop from record 1955 output would leave 1956 as the third best auto year on record.

Before this year, only 1950 had topped the 6,150,000 mark.

—•—

Construction prices have risen sharply in parts of the country where jobs are plentiful and contractors aren't "hungry" for work. Most places, though, bids on attractive projects aren't up much from a year ago; they're held down by a steady rise in the number of contractors competing for the available work.

That was the finding of an on-the-spot check by Business Week reporters across the country this week.

Basic factors are working toward higher building costs—at least where contractors don't find they have to use too sharp a pencil.

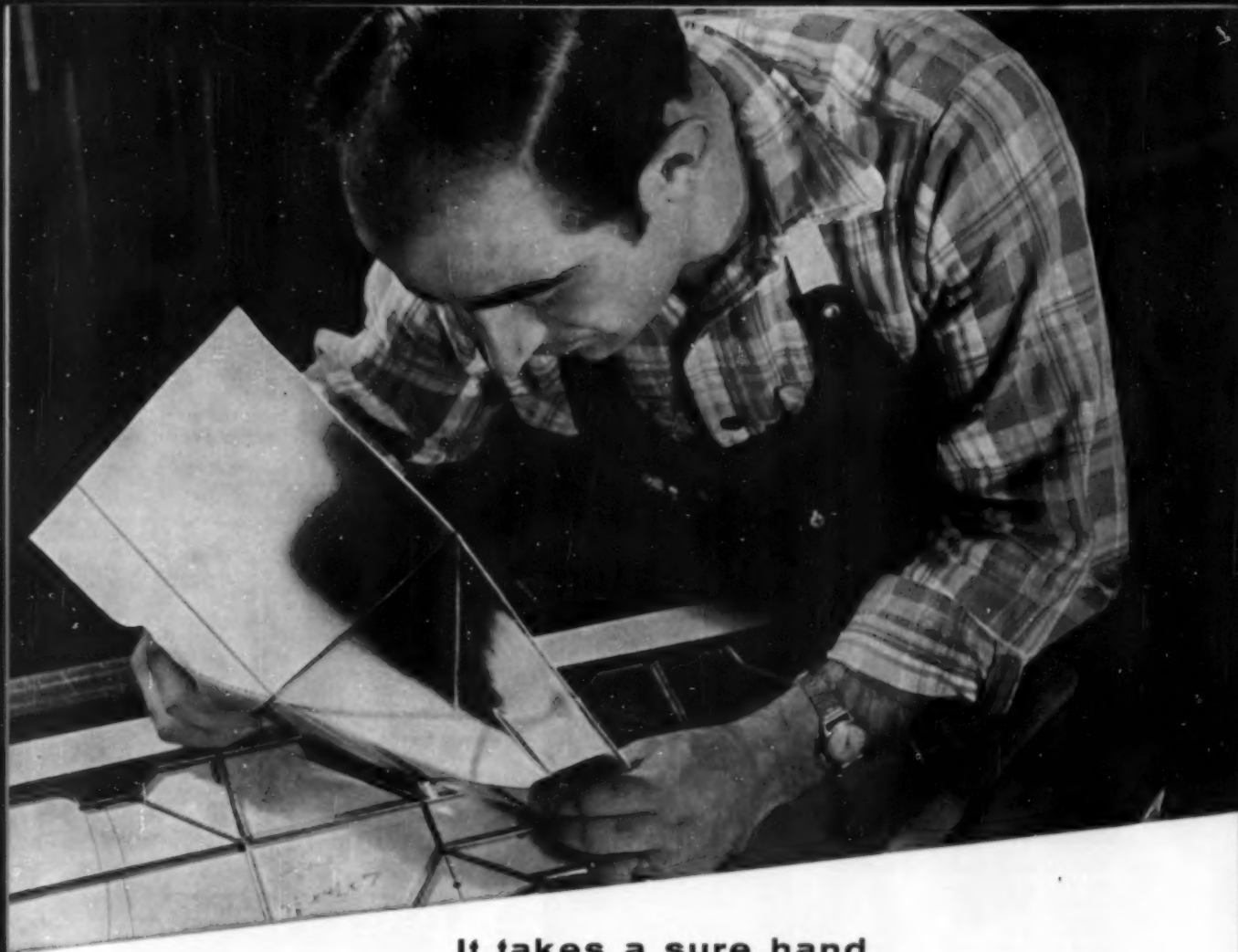
There are more than just the obvious price boosters—higher wages, cement, and structural steel.

You must also take into account electrical supplies and wiring, pipe, plumbing supplies, heating and ventilating equipment.

—•—

Output of several scarce raw materials is gradually improving.

Steel has reached 97% and shortly should approach full capacity. Aluminum set another monthly record in August at 133,550 tons. And the flow of copper is smoothing out with the strikes over.



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Star studded with features that provide fastest installation or rearrangement of motor control, maximum space economy, unparalleled motor control performance and new safety for men and equipment.

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Unitrol Uni-Plug Saves Time

Uni-Plug automatically connects each control unit to its power supply when the unit slides into operating position. It also assures complete disconnect whenever the unit is pulled forward for inspection or attention. All units can be locked in "disconnect" position. Unitrol Uni-Plug thus saves wiring and rewiring time—and insures safety.



Self-Aligning Disconnect Operators

Unitrol control units can be equipped with either fused disconnect switches or circuit breakers. Both types have self-aligning three-position operators which are arranged for padlocking with as many as three locks in "off" position.

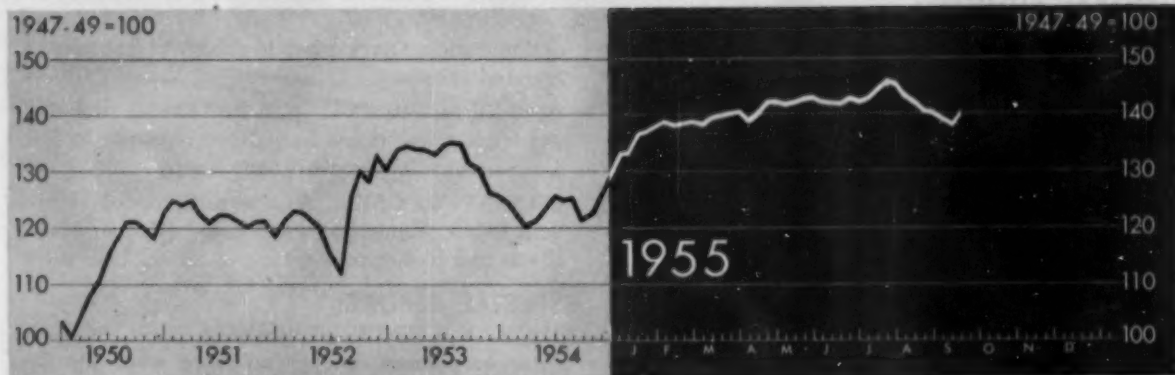
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New C-H Three-Star Control Units

New Superlife Vertical Contacts end care and costs for all time in normal control uses. Adjustable Load Sensing Coils with 3% overload accuracy (compared to usual 12%) permits motors to work harder safely. Full 3-Phase Protection now costs as little as \$6 (list price) additional per control unit. Compare this with the cost of just one motor burn-out.

FIGURES OF THE WEEK



Business Week Index (above) *141.0 †138.6 141.0 121.2 91.6

PRODUCTION

Steel ingot production (thousands of tons).....	2,309	12,309	2,186	1,637	1,281
Production of automobiles and trucks.....	145,437	†98,546	165,094	74,026	62,880
Engineering const. awards (Eng. News-Rec. 4-week daily av. in thousands)....	\$66,051	\$58,806	\$51,653	\$54,117	\$17,083
Electric power output (millions of kilowatt-hours).....	10,580	10,155	10,812	9,074	4,238
Crude oil and condensate production (daily av., thousands of bbls.).....	6,684	6,655	6,701	6,196	4,751
Bituminous coal production (daily average, thousands of tons).....	1,714	†1,587	1,553	1,350	1,745
Paperboard production (tons).....	290,350	218,751	282,969	244,607	167,269

TRADE

Carloadings: manufactures, misc., and l.c.l. (daily av., thousands of cars).....	74	75	73	68	82
Carloadings: raw materials (daily av., thousands of cars).....	57	58	56	48	53
Department store sales (change from same week of preceding year).....	+11%	+11%	+3%	-5%	+30%
Business failures (Dun & Bradstreet, number).....	191	205	216	195	22

PRICES

Spot commodities, daily index (Moody's Dec. 31, 1931 = 100).....	409.7	410.2	404.1	407.5	311.9
Industrial raw materials, daily index (U. S. Dept. of Labor BLS, 1947-49 = 100).....	98.2	98.1	96.8	87.3	†173.2
Foodstuffs, daily index (U. S. Dept. of Labor BLS, 1947-49 = 100).....	78.3	78.8	78.8	95.4	†175.4
Print cloth (spot and nearby, yd.).....	19.0¢	18.9¢	19.0¢	19.0¢	17.5¢
Finished steel, index (U. S. Dept. of Labor BLS, 1947-49 = 100).....	153.9	153.9	153.9	144.6	†176.4
Scrap steel composite (Iron Age, ton).....	\$44.17	\$44.17	\$43.83	\$30.17	\$20.27
Copper (electrolytic, Connecticut Valley, E&MJ, lb.).....	43.965¢	44.560¢	40.875¢	30.000¢	14.045¢
Wheat (No. 2, hard and dark hard winter, Kansas City, bu.).....	\$2.16	\$2.11	\$2.13	\$2.39	\$1.97
Cotton, daily price (middling, 14 designated markets, lb.).....	32.85¢	33.25¢	33.64¢	34.56¢	**30.56¢
Wool tops (Boston, lb.).....	\$1.73	\$1.75	\$1.76	\$2.23	\$1.51

FINANCE

90 stocks, price index (Standard & Poor's).....	358.2	†352.2	335.1	251.8	135.7
Medium grade corporate bond yield (Baa issues, Moody's).....	3.59%	3.59%	3.57%	3.48%	3.05%
Prime commercial paper, 4-to-6 months, N. Y. City (prevailing rate).....	2½-2½%	2½%	2½-2½%	1½-1½%	1-1%

BANKING (Millions of dollars)

Demand deposits adjusted, reporting member banks.....	56,110	†55,555	55,360	54,490	†145,820
Total loans and investments, reporting member banks.....	84,735	†84,150	84,210	82,440	†171,916
Commercial and agricultural loans, reporting member banks.....	24,400	†24,080	23,940	21,023	†19,299
U. S. gov't guaranteed obligations held, reporting member banks.....	30,940	30,791	31,261	35,790	†149,879
Total federal reserve credit outstanding.....	25,577	25,401	25,495	24,939	23,883

MONTHLY FIGURES OF THE WEEK

	Latest Month	Preceding Month	Year Ago	1946 Average
Housing starts (in thousands)..... August.....	123.0	115.0	114.3	55.9
Bank debits (in millions)..... August.....	\$167,358	\$161,748	\$151,504	†\$85,577

* Preliminary, week ended Sept. 17, 1955.
† Revised.

†† Estimate.
** Ten designated markets.

§ Date for "Latest Week" on each series on request.

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LOOK WHAT RUBBER PRODUCTS MADE WITH NEOPRENE ARE DOING



Molasses flows under the sea in 20-year-old neoprene hose

Some of the first neoprene hose ever made is still seaworthy after twenty years of rugged service in the Hawaiian Islands. The hose shown above—used to transport molasses from shore to ship—is battered by waves, cross currents and ground swells for 34 hours at a time while tons of molasses pour into the tanker's hold.

BUT THE BEATING the neoprene cover and tube take in salt-water service is only a part of the rough duty. For months the hose must lie in storage in the tropical sunlight and under the prolonged stress of supporting its own weight. Ordinary rubber would

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TEXACO
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Business: The Pace Gets Hectic

- The boom is picking up steam faster than anybody thought it could—and breaking through all barriers.
- So far the money managers have kept it on the track without holding down its forward surge.
- There are still some hurdles to pass, but from here it looks like full speed ahead for 1956.

The boom has picked up a momentum that takes your breath away. It's moving along faster than anyone predicted as 1955 opened. It has jumped barriers that looked formidable only a few months ago—the looming gluts in housing and automobiles. It's running just about all out now—with 65.5-million Americans working, and with shortages of steel, copper, glass, and other materials developing.

It's a worldwide boom. Britain is throwing up storm fences against inflation. Australia is feeling the heat of rising prices.

And it's a wonderful boom in which to do business. Department stores can't get stock fast enough to keep ahead of the customers. Ford has just raised its prices \$46 to \$99. Cadillac is coming out with a 305-hp. engine, a gold-plated grill, and an \$8,500 price tag. The stock market is edging up to 500 on the Dow-Jones—27% above 1929.

• **On the Track**—About the only people who could be uncomfortable—and they're not hurting by any means—are the money managers in Washington whose job it is to influence the economic climate. They've found the boom resplendent so far because something of a minor miracle has kept consumer prices level.

But money managers—and the politicians looking over their shoulders—have the responsibility for seeing that the boom doesn't go so far so fast that it breaks in the middle of next year—an all-important bit of timing for an Administration that will be going to the voters just about a year from now.

So far, though, Administration officials and economists feel their efforts to cut spending and tighten credit have kept the boom right on its tracks (page 26). The experts are just as happy

about business prospects as are businessmen. And to businessmen the picture is bright.

• **Up and Up**—Right now, practically everything points up. Automobile dealers feel they're beyond what might have been a very sticky business in getting rid of 1955 models. Now they'll have more horsepower, more safety features, more margin in prices to work on. Few of them have qualms (BW—Sep. 17'55, p25). Home builders are feeling the credit brakes set against them, but they have a big batch of this year's houses to finish off still.

I. The Power Behind It

In other areas, it's hard to find businessmen who are visibly glowing. They may even have fingers crossed. But few have had it so good before—and the prospects for the next six months are rosy. There are three big forces feeding strength into the boom.

• **Retail customers** are out to break all records this year. Retail sales will be up from about \$170-billion last year to about \$185-billion this. Cash registers will ring out Christmas more merrily than ever. True, installment credit is at its all-time high. But with incomes swelling—personal income is already running well above \$300-billion—the repayment of debt is also setting records.

• **Businessmen** trying to build up inventories can boost over-all spending for some months to come. Take the case of manufacturers. Their sales have been booming, but they haven't been able to build up inventories to match. Instead, they've had six months of spot shortages of metals. On the latest figures (July), their inventories were \$43.9-billion. In January, they were \$43.6-billion.

• **Capital investment** is swinging up. Management men rushing to build new facilities to catch up with the sales demand are planning to push their spending to a record (BW—Sep. 17'55, p28). And the backlog of heavy construction work mounts steadily as local governments rush to get highways, schools, and sewer systems under way.

Taken together, these powers behind the boom seem sure to push business to new highs in early 1956. The best measure of over-all business, gross national product, is now running about \$385-billion. It's likely to reach \$400-billion next year.

II. Weighing the Dangers

Taken together, though, these forces might generate inflation. We're going into the fall, when business normally swings up, with very little slack in such basics as manpower and steel capacity. The step-up in capital spending will sometime be turned into new steel mills and turret lathes that will increase production. But in the meantime, capital spending adds to inflationary pressures, puts more pressure on steel, boosts incomes.

Moreover, businessmen in industry after industry have seen their costs creeping up for two years or more—while they've held the line on prices. This year's round of wage increases—up to 20¢ an hour—has added to the pressure on costs. Now the psychological barrier against raising retail prices may be breaking down. The fact that Ford—and other auto makers—are raising prices means some of the sharpest merchandisers in industry think the customers will accept higher prices.

One economist taking a sober view of the boom summed it up this way: "It's almost like wartime. The real demands on production—for everything from shoes to schoolhouses—are bigger than you can fill. But it's different from wartime in that you don't have any system of priorities. You can't ration out steel and copper to essential users and let the others go."

III. Checks and Balances

This is the kind of pressure that can turn into inflation, set off a round of

price increases. But so far a couple of major forces have checked it.

Farm prices have been sliding down, balancing the rises on the industrial side. Unhappy farmers have watched their prices coasting down while everyone around them prospered.

Competition has been rough. For months now, auto dealers have been selling cars at prices that represented the cost to them plus, perhaps, \$100. Discount houses and many a department store have shaded list prices on appliances. So there has been something of a paradox: The economy has been swinging handsomely upward, breaking one record after another, but customers at retail counters have been able to swing deals on prices.

This has worked well for the small group in Washington—officials and economists in the Federal Reserve System, in the Treasury, in the Council of Economic Advisers, and high in the Administration—who are charged with keeping the economy on an even keel.

• **Brakes, But No Squeeze**—So far, the boom has gone just about the way they wanted it to. Business picked up smartly in the fall a year ago. In April, the credit authorities began applying the first gentle brake (story at right). They've tightened up more since.

So far, the experts believe this summer's credit tightening has worked about on schedule. It hasn't squeezed any part of the economy too much—but it has given businessmen sober second thoughts on raising prices or rushing to build inventories. And the controls have eased back home building and highway construction enough to keep the construction boom from running off the tracks.

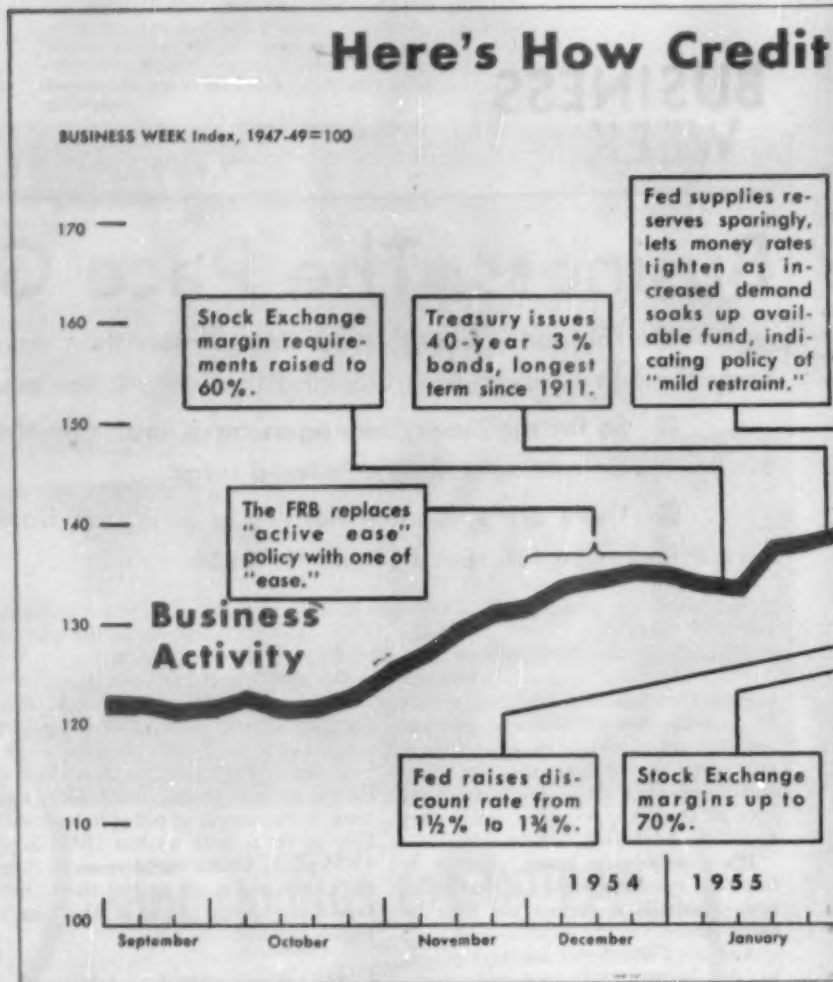
IV. Jumping the Hurdles

Coming up for the money managers are two things that will complicate their job of keeping the most complex machine in the world, the U.S. economy, on its tracks. The two: tax cuts—to which both Republicans and Democrats are committed—and election.

• The tax cuts pose a nice problem of throttling back the economy just enough to absorb the fresh spending money customers will have and prevent added pressure on prices.

• And the election means the throttling back must be gentle. Credit controls can take hold harder than they're expected to—as they did in May, 1953, when for a few days there was literally no money to lend legitimate borrowers. No one wants a repeat of the 1953-54 recession.

But the readings on the economic barometer are high. For a businessman making up a budget for 1956—as thousands are right now—the outlook is good.



From Now on the

To a Los Angeles manufacturer, tight money is something he "reads about in the paper," but it just doesn't exist when he's in the market for a loan. To a Cincinnati construction man, who was badly squeezed in 1953, tight money is a very real thing. Any mention of it makes him fear that he will be put through the wringer again.

These two conflicting views of current credit conditions are typical of the two extremes of business feeling across the nation. This week, BUSINESS WEEK reporters plumbed that feeling when they questioned businessmen, bankers, and state and local government officials on just how the Administration's restrictive credit policy has affected them so far. The survey covered 21 major cities, and all Federal Reserve districts.

Though it turned up conflicting views like those from Los Angeles and Cincinnati, it showed, too, that the reasons for the conflict lie in the way that credit controls are being applied.

• **Slow Punch**—The Federal Reserve's indirect controls over credit are slow in taking effect. Actually, the Fed has been tightening up on credit since last December (see chart). It started slowly at first, but as business activity soared, it put on the screws with increasing vigor. Today, it is following a policy of full-fledged restraint, aimed at keeping credit expansion in hand.

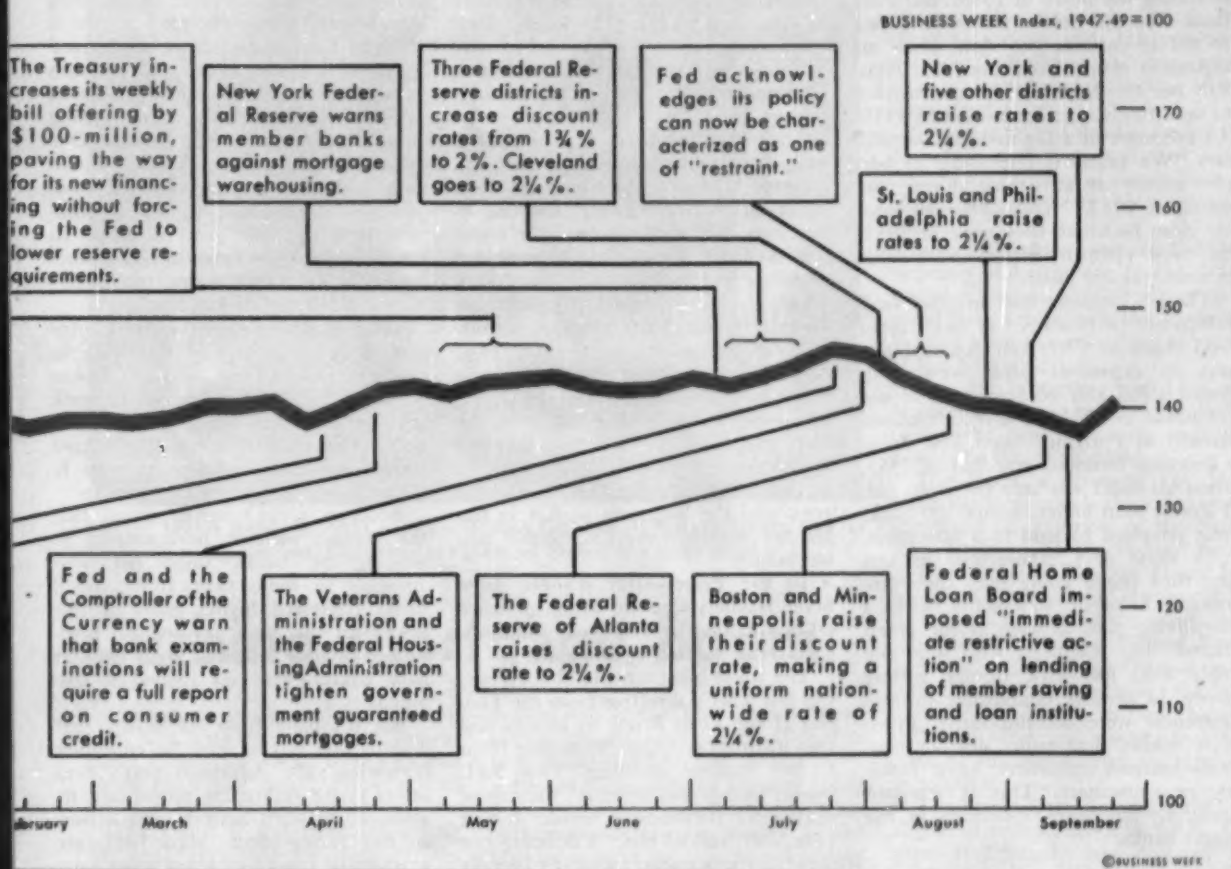
More and more businessmen are feeling the pinch. Until now, though, the squeeze has come unevenly. It has hit some sectors as if it was aimed at them. But other sectors have not, as yet, felt much. This is the general picture:

• Commercial banks have hiked interest rates and are tightening up on all types of loans. By and large, they have felt the pinch.

• Home builders, within the last few days, have begun finding it difficult to arrange financing. Some are cutting back on future operations.

• City and state governments are

Has Been Tightened:



Squeeze Will Get Harder

paying higher rates for loans, and some are deferring public works projects.

- Most businessmen are paying higher rates, but are having no difficulty getting credit. However, newly-formed business and marginal companies are not getting all they ask for—and some are getting no loans at all.

- Expansion and inventory plans of most manufacturers and retailers have not been affected by the pinch.

- The majority view is that credit will get tighter in the next few months.

Even if credit does get tighter, most manufacturers whom BUSINESS WEEK questioned are convinced that they themselves will not feel it. Some are fully prepared to pay higher rates, will worry only if they encounter an actual shortage of capital.

I. Misplaced Confidence?

On the surface, the consensus of businessmen is that the money man-

agers will have to do a lot more tightening before manufacturers are squeezed.

This attitude could come from a happy ignorance, though—for almost 30% of the manufacturers that BUSINESS WEEK questioned have not borrowed money since the beginning of the year. Many have operated on working capital, and they'll pull in their belts rather than go out and borrow. Moreover, almost all those that were questioned have established businesses, and good credit ratings at the banks.

The picture as the bankers see it is considerably less rosy. They say that if they're squeezed any further, even their best and biggest customers will feel the pinch. Bankers don't expect credit to get as tight this year as it did in 1953—mainly because there's an election coming close. But they do think their customers will have to be cautious. "If things really get tough,

then we'll all get hurt," is how one New York banker puts it.

II. What It Felt Like

To get a standard of comparison for the current credit squeeze, you have to look back to conditions in 1953. Most banks admit they were squeezed in those tight money days. So do a majority of home builders, as well as state and local governments.

Some bankers, and a few home builders, feel that present credit conditions are already reminiscent of 1953, but this is a minority opinion.

For the most part, banks say that though they are pinched now, and have raised interest rates substantially, credit is still readily available to all legitimate and regular borrowers.

This is the big difference between 1953 and today. Then, many banks didn't have money to lend and businessmen were squeezed for credit even

when they were prepared to pay higher rates.

• **Who Got Hurt**—Less than half of the businessmen questioned confessed to feeling the pinch in 1953. But even those who did not borrow were forced to cut inventories and slow down on expansion plans. Companies that regularly use the New York money market to raise funds were hardest hit in 1953. An executive of a big finance company says "We found it impossible to borrow money at any price during the spring of 1953." Today, though rates are close to where they were in 1953, the same company reports no trouble in arranging big loans.

The 1953 squeeze hurt new and small companies particularly. A small retail food chain in Cleveland, for example, says its expansion plans were postponed a full year because it could not get funds in 1953. A drygoods manufacturer in Portland (Ore.) now doing a booming business, says that in 1953, when his outfit was only two years old, it almost went under because the banks were reluctant to lend to a newcomer.

In those days, commercial bankers say, they began going over their customers' financial statements with a magnifying glass as soon as the pinch started. Big borrowers who were top credit risks had little trouble getting funds. In general, established business customers were accommodated much more readily than either new—or marginal—business customers, home builders, or consumers. This is standard operating procedure, especially in the bigger banks.

III. Tough New Days

Today, bankers are getting back to that system again. A big Houston bank, for example, says its terms are being tightened "right across the board." A Virginia bank reports its "old-established customers are being taken care of first." A Denver banker says, "we are certainly choosing lenders with more care." In Cleveland and Dallas, bankers are definitely discouraging borrowers. And in Atlanta, one bank says it's cracking down on consumer loans.

Most banks, even those that haven't yet felt the pinch, are trying to weed out speculative borrowers. There has been something like a nationwide cut-back on loans for real estate speculation and merger financing. A Minneapolis bank turned down one regular customer who was piling up inventories. In New York, large commercial banks are wary of loans for stock market speculation.

• **Discouragement**—Interest rates have risen sharply, and most of the jump has come since midyear. Short-term rates are up anywhere from $\frac{1}{8}$ % to 1% since

the first of the year. Long-term rates are also up, but by proportionately smaller percentages.

As a result, manufacturers are after long-term loans—because the difference in rates is so slight. The banks, however, are trying to hold down the ratio of long-term loans in their portfolios, because they don't want their funds tied up.

Long-term borrowers, such as utilities and municipalities, are feeling the pinch especially. The city of Cleveland, with its excellent credit rating, has had to postpone a \$9-million issue for water improvements because of the increased cost of borrowing. The New York Thruway, which refused to pay the going rate for long-term bonds, is borrowing via the short-term market until conditions look better. Buffalo is trying to get by in the same fashion. But some municipalities will be going into the long-term market expecting to pay higher rates.

Some utility companies that have gone into the long-term market in the last few months have had trouble raising money.

• **In the Pinchers**—But it's the large home builders who are being hit hardest by the squeeze. They've found mortgage credit tightening suddenly.

The worst blow yet, the builders say, was last week's directive from the Federal Home Loan Board to savings and loan institutions (page 29), telling them to cut lending activities. One S&L banker brands this move as "the kiss of death" for the housing boom. A Salt Lake City builder says, "I'm being put through the wringer. Now it's literally impossible to make a loan. Loan discount costs are three times what they were at the beginning of the year."

In Seattle, a builder echoed this, predicted that low-cost housing—units priced under \$11,500—will soon become "extinct." In Cleveland, one builder figures the new regulation will cut his housing starts by 25% next year. Another building and loan operator in Ohio bewails his predicament: "I had \$100,000 on deposit with a Home Loan bank a few weeks ago. I pulled it out to make loans. Then I borrowed \$300,000 from the bank. And now where's all the money going to come from?"

IV. Tighter Prospect

Practically every bank reports a big increase in loans over a year ago, and most banks are lending more than they originally planned. Until lately, they were actively searching for customers. Now, the demand for credit is so heavy that they are discouraging borrowers.

The increase in loans did not all come at once. In the first part of the year, most of the expansion was in mortgages. In early spring, consumer

loans started to climb. Now business is coming in to borrow and other loans are being reduced.

• **Fastest Field**—Consumer loans generally have expanded more rapidly than any others. Some of this increase is hidden. Consumer finance companies' borrowings come under the business loan category. And a number of banks say that these companies are borrowing more heavily than ever before. One Atlanta bank candidly admits it is cutting back on an auto finance company's credit because it is more profitable to carry auto loans directly. In fact, a number of banks say consumer credit is safer—and more profitable—than other types of loans.

That attitude among bankers gives you the main reason for the bulge in consumer loans. The attitude applies all over the country. A Toledo bank says its consumer loans are up 20% over a year ago. A small Portland (Ore.) bank has doubled its auto finance paper in the last five months.

BUSINESS WEEK's survey found that the average increase in consumer financing by banks since last year amounts to more than 10%. Small banks registered higher gains in this field than the larger commercial institutions—mainly because small bankers have concentrated on individual customers.

But it's plain from the survey that despite this big increase in consumer borrowing, the Administration's consumer credit tightening moves and its attempts to warn against loose terms, are now taking effect. Many banks are scrutinizing consumer loans more carefully, tightening terms, and even turning away potential customers because their demands are "speculative."

Moreover, business growing demands for credit will mean a curtailment of consumer loans. The large commercial banks know they must accommodate their steady customers. And smaller banks are already pretty well loaned up.

Surprise Deal Gives Paper-Mate to Gillette

The pen is mighty in the marketplace. At least, Gillette Co., of safety razor fame, has agreed to pay \$15.5-million for the Paper-Mate Pen divisions of Fawley Corp., which claims 80% of the market in ballpoint pens. At midweek, no formal contract had been signed for the sale, which carries on the diversification drive begun by Gillette in 1947 when it bought the Toni home permanent wave.

Eversharp, Inc., which also makes pens and razors, had been dickering for Paper-Mate and thought it had the deal sewn up till it was notified last week by telephone, of the sale to Gillette.



HOME LOAN BANK BOARD members William Hallahan, Walter McAllister, and Ira Dixon ask savings and loan associations to tighten up lending in a move aimed at . . .

Curbing Mortgage Boom

Officials of savings and loan associations this week took a second look at credit restrictions posted by the Federal Home Loan Bank Board, and wondered just how tough they really are.

The board is the credit-controlling and credit-supplying supervisor for the 4,200 savings and loan associations, functioning in much the same manner as the Federal Reserve Board does for the commercial banks that are in its system.

The new policy—announced by Walter W. McAllister, chairman of the Home Loan Bank Board—is designed to cut back the amount of money available for mortgages. Savings and loan associations have been borrowing heavily from the 11 district Home Loan banks to obtain mortgage funds. But McAllister now advises the bank presidents to discourage this.

From now on, local lenders are requested to limit their loans to the funds they collect from deposits and loan repayments.

McAllister's move is in line with other steps taken by the Administration in recent months to slow down housing credit. In July, the New York Federal Reserve Bank discouraged the warehousing of mortgage loans, and tighter terms were announced for mortgages insured by Veterans Administration and Federal Housing Administration (BW—Aug. 6 '55, p. 25). And the Home Loan Bank Board itself issued a warning against excessive lending. Last

month, the Home Loan banks began raising interest rates on funds loaned to building and loan associations.

• **Out of Kilter**—Behind the new policy is a boom in mortgage lending that has outstripped increases in savings. In the first six months of this year, building and loan associations wrote \$5.8-billion worth of mortgages, a jump of 44% over the \$4-billion in the first half of 1954. But in the same period, savings went up only \$300-million, a 14% gain.

Thus, associations have been getting the major part of their new funds by borrowing from the Home Loan district banks.

"The tremendous increase in lending by the savings and loan associations, without a corresponding increase in net savings, was resulting in inflationary lending," McAllister told the Home Loan bank presidents, in explaining the tighter policy.

• **How Tight?**—Just how tight the new restrictions will turn out to be in practice is a puzzle to building and loan representatives in Washington. They are advising local associations to wait and see how the new policy is put into effect.

McAllister himself stressed that the district banks will continue to lend money to associations in two types of cases: where the money is needed to fulfill firm commitments already made, and where it is needed to meet withdrawals of savings. These regular func-

tions of the district banks will not be changed.

McAllister also said an advance would be proper to meet actual cash needs whenever "a member has made every effort to comply with the present restrictions." Building and loan spokesmen are wondering how this will be interpreted.

Some see it as a flexible device that, in actual operation, will not reduce sharply the lending of funds from the Home Loan banks to the local associations.

• **Surprise, Anger**—Even so, they were surprised and angered by the board's action. Congress recently separated the board from any tie with the Housing & Home Finance Agency, over objections of the Administration.

The Administration feared an independent board might wind up working contrary to general housing and credit policy. In theory, it could.

The board works with the Home Loan banks in much the same way as the board of governors of the Federal Reserve does with the Federal Reserve district banks. When the Home Loan banks ask approval for changes in the technically they asked the board to approve the hike, just as Federal Reserve banks ask approval for changes in the discount rate. But actually, the banks and the board work in close harmony with each other and changes in interest rates or lending policies are agreed on in advance.

The Home Loan Board has the same degree of independence as FRB. Congress traditionally has declared that credit policy should not be a direct function of the executive department. The separation of the Home Loan Board from the other housing agencies is a continuation of this tradition.

• **Eisenhower Appointees**—In its first important test, however, the board fell readily in line with the Administration's general policy of credit restriction. For one thing, all three members of the board—McAllister, the chairman, Ira Dixon and William J. Hallahan—are Eisenhower appointees. This week they called the presidents of the district banks to Washington to clarify the new policy.

Their recent experience in raising funds in the money market may have strengthened their hand. To meet the needs of the district banks, the board borrowed \$200-million in June, and the same amount in August. But in September, after inquiring about the availability of funds, they limited their fund-raising to \$75-million. They felt this was all the market would yield at the interest they wanted to pay—2½% on nine-month notes. "We simply couldn't raise as much money as the district banks wanted," one official declared.

Business Eyes the Red Market

Cattle deal points up growing U.S. interest in Iron Curtain sales since Geneva—but it's still limited. Travel is likely to gain before trade bars are let down.

The Dept. of Commerce last week issued a license for export to Russia of 64 head of Santa Gertrudis cattle—the new breed developed on the King Ranch in Texas.

That in itself was hardly a major item in international trade—but it represented the first solid bit of U.S.-Russian business that could be attributed to the "spirit of Geneva" fostered by the July meeting of the Big Four heads of government. And it pointed to a growing, though somewhat limited, interest on the part of U.S. businessmen in finding markets behind the Iron Curtain.

The sale of the Santa Gertrudis breeding stock (44 heifers, 22 bulls) results directly from the August visit to the U.S. of a group of Russian farm officials. So in its small, \$64,000 way it serves to illustrate that travel is tightly interwoven into the fabric of commerce.

• **Negotiation**—Next month, foreign ministers of the Big Four will return to Geneva to explore, among other things, what steps can be taken to give substance to the July agreement in principle that it is desirable to improve trade and cultural relations.

Before Secy. of State Dulles takes on Foreign Minister Molotov, the U.S. has a big decision to make—whether to make Moscow pay a political price, say concessions on Germany, before further opening up trade and cultural relations (page 163).

• **Interest**—From the standpoint of U.S. business, the quickening of interest in Iron Curtain markets since Geneva is still on a relatively small scale—at least as it is reflected in inquiries to the Dept. of Commerce about the possibility of doing business with Russia and the Soviet bloc.

"Moderate, but noticeable" is the way one official of the Bureau of Foreign Commerce describes the increase in these inquiries—though another says the surprising thing is not how many, but how few, U.S. firms have asked BFC about Iron Curtain sales.

The inquiries do indicate, however, an interest in widening the present narrow range of commodities in U.S. sales to Russia and the satellites—mainly tobacco, wool rags, agricultural chemicals, and cattle hides. A U.S. textile machinery maker, for example, asked whether he could get a license to sell \$40-million worth of machinery in the Russian orbit. In one week,

two companies inquired about licenses for tires, and other inquiries came in on carbon black and chemicals. So far, none of these has developed orders.

Those who show the most serious interest in Iron Curtain trade, one official says, are the men "who deal in raw materials—ores, wool, scrap."

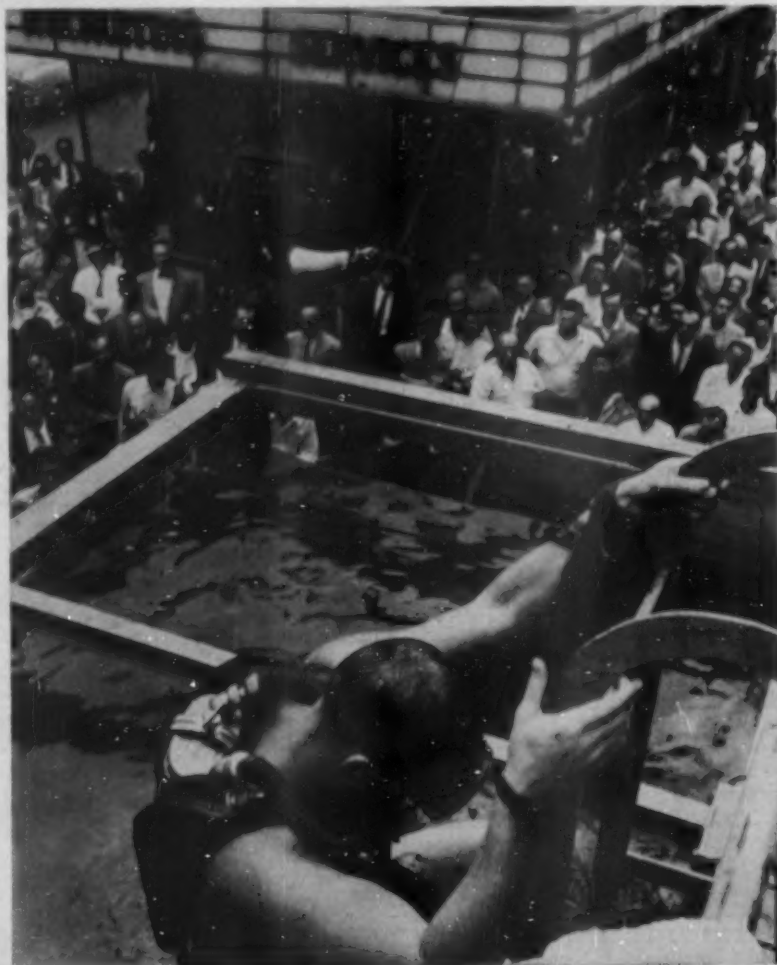
• **Debate**—The inquiries reveal another basic fact: Quite a lot of corporate soul-searching about policy is going on right now in board rooms across the country. You can see that in the

rash of "iffy" questions that come in to BFC—"What would the government think if we got an order. . .?"

General Motors has already shifted its policy and has advised its people abroad that they can sell to Red countries now, if the U.S. will license the sales (BW—Sep. 3 '55, p27).

• **Stimulus**—The real extent of U.S. interest is hard to gauge. Commerce Dept. feels the queries from U.S. concerns result in many cases from a request to them from the official Russian trading agency, Amtorg, for a catalog.

This would seem to account, at any rate, for the disproportionate share of inquiries that come from farm machinery manufacturers. BFC says the Russians have circularized this industry more than any other, and the companies, uncertain about policy, want to know if they should supply a catalog.



Navy Fishes for Volunteers—Drafts, Too

For almost a decade, the Navy has proudly proclaimed itself an all-volunteer service. But last week, troubled by a sagging reenlistment rate, it was forced to call on the nation's draft

boards for 56,000 men by next July.

Meanwhile, the drive for volunteers goes on—with demonstrations, like the one above, by Navy frogmen in New York's Times Square.

BFC's stock reply on supplying catalogs is: All right, if your book merely supplies price lists and item descriptions—without any specifications.

• **Policy**—Basically, U.S. government policy on trade with the Reds is toleration, not encouragement nor promotion. Nevertheless, the presumption is that BFC will grant an export license if the commodity is not in short supply and not on the prohibited list.

The presumption is not a certainty, however. Last June, BFC turned down a request for export of 150 tons of seed for one variety of forest tree (neither a military item nor scarce), on the ground that it represented "a substantial segment of total inventory."

• **Hurdles**—There are other hurdles, too. Most inquiries to BFC don't have orders behind them. One substantial license in the chemical field was returned for cancellation—the deal fell through. A BFC official says it expects about 90% of the material it licenses for all exports will actually move—but not more than 50% of what is licensed for the Soviet bloc.

The question of payment is no real obstacle, he says, because business with the Reds is a cash-and-carry affair. But the Commerce Dept. doesn't think the Reds have sizable cash funds to spend for what we can sell.

• **Going After It**—Some U.S. businessmen, however, are making a strong bid for the cash that is available. The Burley Tobacco Growers Cooperative Assn. has authorized its foreign representative, R. C. Travis, to go to Russia to try to talk the Russians into using more burley. The association wants to get its tobacco "in on the ground floor" if the Russians are going to do more business with the U.S.

• **Easing Up**—As far as the U.S. is concerned, you can look for travel concessions ahead of any substantial liberalization of trade regulations. The word around the State and Commerce Depts. is that the U.S. is ready to give its blessing not only to business trips but to travel for its own sake.

As things stand now, any "legitimate person" who can give a legitimate reason has a good chance to get a passport validated for the Soviet Union and the European satellites except Bulgaria and Albania (where we have no diplomatic representation). The Russian embassy in Washington is now more lenient with visas.

Intourist, official Russian travel agency, is preparing to open a New York office. At least three U.S. agencies are negotiating with it on handling the expected flow of tourists. Gabriel Reiner, president of Cosmos Travel Agency in New York (one of the few that has been booking trips to Russia over the years), now gets about eight inquiries a day on Russian travel.



WAITING for attack that didn't come, troops guard Argentine Government House while . . .

Peron's 100 Days Run Out

His flight from power leaves a vacuum in Argentina that a conservative, nationalistic military group is trying to fill.

The Hundred Days of Juan Domingo Peron are over.

The drama began June 11, when 100,000 Catholics demonstrated in downtown Buenos Aires. This was perhaps the largest single affront to Peron since he consolidated his power a decade ago. Then came a staccato of events: Peron was excommunicated June 16; navy and air force groups rebelled later that day; Peron's army stooges came to his rescue.

Nearly three months of confusion followed. Peron seemed cowed, dominated by the military. Then, a few weeks ago, there was a glimmer of the old Peron, rallying his worker-supporters, hurling defiance at his enemies.

That was too much for the soldiers. Last week, revolt flared in the provinces, and on Monday, 100 days after the Catholics marched, Peron was forced to resign and seek asylum on a Paraguayan gunboat.

• **Outlook**—What next in Argentina? A few observers, souls of caution, see the bare possibility that the resourceful Peron can find a route back into Government House. The overwhelming majority is sure he's through. Likely now is a period of uncertainty and jockeying for power. No one man, political party, or group is waiting in the wings. The jackbooted, peak-capped soldiers are the only source of power capable of ruling Argentina now. And while at midweek they had picked rebel commander Gen. Eduardo

Lonardi, 59-year old artilleryman, as provisional president, it's unlikely that the succession has been nailed down.

Indeed, while Argentines hail liberty, they can't forget that this week's rebellion has some resemblance to the "Colonel's Revolt" of 1943, which moved Peron to a position where he could begin building his empire.

At worst, then, Argentina can jump out of the Peronista frying pan into another authoritarian fire. At best, a necessary period of military rule—and trouble—could gradually work a parliamentary, constitutional, civil rule back into Argentine life.

• **Pride and Business**—Below the purely military surface of this week's events are strong forces seeking to restore the "national honor" of Argentina, and with it their own business and political interests.

Above all, it was a conservative revolution. The navy, bound to old traditions, pro-U. S., always recalcitrant to Peronism, was at the center of the coup. Peron never succeeded completely in getting the army behind him, and there were enough soldiers—especially in the provinces—ready to rebel. Many more groups were behind the movement in spirit.

Among them were: the Church, and the new Christian Democratic movement; Socialists, the conservative Radicals, and other political groups, wealthy landowners, bankers, exporters, commercial people; intellectuals and

students. These men want many things—some a restoration of civil liberties, some a new deal for the raped Argentine economy, a political voice, and national dignity.

• **Shirtless Ones**—The unknown quantity is Argentine labor, coddled and cajoled by Peron, organized as a political force, a semi-militia. The military rulers will want to cut back the power of the union bosses who played ball with Peron, but they'll try not to alienate Argentina's 1-million or so workers.

Recently, Argentine workers have themselves seemed fed up. Living costs have climbed 22% in the 15 months since the last general wage rise and unemployment may be as high as 16% of the work force. So the Peronist labor front may collapse without its sponsor—but Peron's successors will have to deal with labor's demands.

Economic troubles weren't an obvious rallying cry of the revolution. And no hints have come of the economic ideas of the new rulers.

• **Anti-Yanqui**—It's possible they will show a strong nationalist bent, especially in foreign investment problems. One of the most telling charges against Peron has been that of "entreguismo"—selling out to foreign capitalists. (This cry was raised loudly against Standard Oil of Calif., whose oil development deal with Peron has been stalled.) Still, Argentina's military bosses could be nationalistic in matters of oil, and get along famously with

outside bankers and manufacturers in other fields.

Some U. S. and European business and government people have reservations about this week's events. Some who worked closely with Peron felt that in business matters he was coming around. More than one American executive has spoken of Peron as "a fellow you can do business with." A question, then, is how Peron's successors will react to the business people who worked closely with the Peronists.

But these are exceptions. Most old hands of Argentine business feel the economy couldn't be in much worse shape and that a change can't help being for the better.

U. S. investors in Argentina, with perhaps \$400-million in plants and properties, and \$150-million in frozen earnings, are cautiously hopeful. Many have been holding the fort since 1947, the last year of any significant profit remittances. Some, like Ford of Argentina, have made do with odd jobs in empty plants. Others, like the big meatpackers, (Armour, International Packers, Wilson) have stayed in business, often thanks only to government subsidy.

• **Late Trends**—These businessmen speak of some mellowing in Peron's attitude toward outside capital. The Argentine government has made much of a law designed to attract new investment. A few weeks ago, there was an agreement to allow some funds to be remitted on old investments.

Peek at '56 Cars

New models have few major body changes, but prices are higher, and engines are more powerful.

All of the Big Three auto makers either were showing or talking freely about some of their 1956 models this week. And from what they rolled into the showroom or dinned into the ears of Detroit reporters, it looks as though the theme for 1956 is higher horsepower and higher price.

Ford Motor Co., by virtue of being the first to introduce its 1956 lines, seems to be setting the price pattern. First to appear was the Lincoln, with price increases seemingly ranging from \$14 to \$265. But prices are not strictly comparable with those of '55 models. Lincoln is an all-new design and has a new series, the "Premier," on the high end of the line. Last year's lowest-priced Lincoln, the Custom series, has been dropped. And power steering is standard equipment, not optional.

• **Price Trend**—This week, the 1956 Ford made its bow, with the most noticeable change being in the chrome molding on the side. Like all of the company's lines, the 1956 Fords have new safety features (BW—Sep. 17 '55, p. 67). Prices on the Fords also are up—from \$46 to \$99. But Ford cut the price of power steering as optional equipment by more than 40%, to \$49.50. And this may give another clue to 1956 price trends—higher base prices, lower prices on options.

Mercury models, out next week, also are expected to carry bigger price tags.

And this week, at its press preview, Cadillac Div. of General Motors indicated it would increase prices.

• **More Power**—Cadillac and Chrysler cars will not be introduced until next month, but already it is apparent that horsepower will be increased. Lincoln for 1956 has 285 hp. so, of course, Cadillac has announced the same figure, but with 305 hp. in its Eldorado series. Chrysler's Imperial and New Yorker de luxe lines probably will match the competition. And horsepower is up in both the Ford and Mercury lines.

You'll see a new style car in all lines—the four-door hardtop pioneered last spring by Buick and Oldsmobile. Another noticeable change in styling is upswep rear fenders on Chrysler cars.

Aside from safety features, the major driving innovation seems to be coming from Chrysler—a push-button transmission selector, mounted on the dash. And, Chrysler has come up with a new wrinkle in accessories—a record-player.

Union Pacific Switches Partners

With shift of UP's fast coast trains to Milwaukee's route, North Western will try to beef up its freight.

If you're taking one of Union Pacific's fast Chicago-Denver-West Coast trains any time from Oct. 30 on, you'll be leaving from Chicago's Union Station instead of the North Western Station a couple of blocks further north. Beginning on that date, UP's five "city" streamliners will make the Chicago-Omaha part of their run over the tracks of the Milwaukee RR instead of the North Western's.

The divorce and remarriage was announced jointly this week by the Union Pacific RR, Southern Pacific RR, and Chicago & North Western Ry. (Southern Pacific gets into it because the UP's City of San Francisco operates over the Southern Pacific west of Ogden, Utah.) Freight is not involved.

• **All Happy**—It ends a joint operating agreement between the UP and North Western that goes back far beyond the turn of the century. The roads aren't saying how the split started—though UP apparently initiated it—but the in-

dications are that all concerned are quite happy.

With the UP streamliners coming into Union Station in Chicago, its passengers will be able to make connections not only with Milwaukee trains but with those of the Pennsylvania, the Burlington, and the Gulf, Mobile & Ohio RR. UP's Pres. A. E. Stoddard spoke of improvements "from a service standpoint." There's also a report that the UP hasn't been too happy with the North Western's roadbed.

North Western, for its part, says it has been disturbed over the arrangement because of a number of factors, particularly operating costs.

• **Equipment**—The Milwaukee figures on making the operation profitable. It says it will buy \$8.5-million additional diesel power—of which \$5.5-million is attributable to the new service—and will spend \$1.5-million for new signaling devices to make better use of its double track.

\$1, 542, 263 worth of black ink

A BOOKKEEPING STORY by Mr. Friendly

COMPANY	PRODUCT	TOTAL SAVINGS ON INSURANCE
Houghton Mifflin Co.	Publishing	\$ 37,906
Heintz Manufacturing Co.	Metal Products	303,949
Continental Mills	Textiles	49,146
Dodge Manufacturing Corp.	Metal Products	82,954
Acushnet Process Co.	Golf Balls & Rubber Products	199,301
The Bristol Brass Corp.	Brass Sheets, Wire	72,002
Sealed Power Corp.	Piston Rings, Pistons and Cylinder Sleeves	156,000
Utica Drop Forge & Tool Corp.	Tools & Jet Parts	212,734
Alice Manufacturing Co.	Textiles	63,555
Fayette R. Plumb, Inc.	Tools	26,950
Avondale Mills	Textiles	107,113
W. C. Hamilton & Sons	Paper	73,640
Yates-American Machine Co.	Machinery, Motors, Metal Products	100,102
Allen-Rogers Corp.	Woodworking	25,025
Freiberg Mahogany Co.	Lumber	31,886
		\$1,542,263

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This is certainly one for the books—proof in black ink and white paper that American Mutual's safety engineering service for its policy holder companies pays off in impressive figures.

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BW-G-24-55

BUSINESS BRIEFS

Home comeback: The June-July slide in home building (BW-Sep.10'55,p26) ended abruptly in August, the Labor Dept. reports. August starts were 123,000, a gain of 8,000 over July, and 7% more than the year-before month.

Faith that steel expansion (BW-Sep.10'55,p25) will continue a long time seems to lie behind Blaw-Knox Co.'s offer to buy Continental Foundry & Machine Co. for about \$25-million. Adding Continental's products to its own line of steelmaking equipment would enable Blaw-Knox to bid on all sizes of steel rolling mills. . . .

... And steel puddling's proof was seen late this week when Pittsburgh Steel Co. joined the expansion parade with announcement of a \$15-million program that will add 15% to capacity by March, 1957.

More oil and more demand are seen on the horizon. The Texas Railroad Commission raised the October allowable by 64,772 bbl. per day. The new crude production limit is 3,148,459 bbl. a day for 16 days. . . . West Coast demand for petroleum in 1955 will run about 9% above 1954, says Union Oil Co. Pres. Reese H. Taylor. By 1960 he sees an average daily demand on the Coast of 1.3-million bbl.

Refurbishing MoPac: The latest reorganization plan for the Missouri Pacific RR has been confirmed by the U.S. District Court in St. Louis. Unless appeals bring a reversal, the road should start back into private ownership fairly soon after its long technical bankruptcy.

Promoting the atom continues briskly. The National Advisory Committee for Aeronautics announces that the government will build a \$4.5-million reactor near Sandusky, Ohio, for research on nuclear-powered planes. . . . The Atomic Energy Commission has issued a second invitation to private industry to get into the production of atom-fueled power, this time with small units.

It worked: The Baltimore & Ohio's \$280-million refunding is officially a success (BW-Sep.17'55,p160). Sales and exchanges of the securities passed the required 75% mark before the mid-week deadline.

Severance pay for salaried employees has been set up by Ford Motor Co. after one year of service, laid-off employees become eligible for one month's pay; the severance ranges up to three months' pay for five or more years seniority.

See what adhesives are doing today!



Working on the railroad—for your comfort

You can't see them. You can't hear them. But you certainly can *feel* the cool, calm, quiet comfort that 3M products contribute to the modern railroad car.

The man in the picture, for example, is making sure that the air-conditioning unit in a commuter car *keeps* its supply of pure, filtered air. He simply presses a length of 3M's reinforced ribbon sealer into position and fastens on a cover plate with screws. This accommodating sealer makes room for the screws . . . *but nothing more*. The result is a compartment that's airtight, dust-tight, just right!

Other applications for 3M adhesives, coatings and sealers in this same commuter car are numbered by the dozen. They hush noise, protect from heat and cold, stop corrosion, calm vibrations, *literally* hold parts of the car together.

See what adhesives can do for you . . .

The best news about 3M products is that, most often, they cut costs while simultaneously improving the product. And it costs nothing to investigate the possibilities in your plant. Call your 3M Field Engineer. Or write 3M, Dept. 19, 417 Piquette, Detroit 2, Mich.



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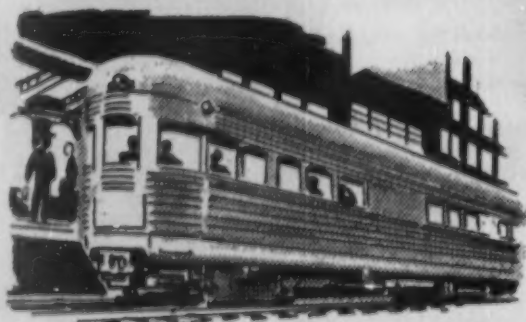
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STEEP RAMPS, LONG HAULS, HEAVY LOADS... NO JOB IS IMPOSSIBLE WHEN ELECTRIC TRUCKS ARE POWERED WITH IRONCLADS. EXIDE MAKES BATTERIES WITH ADEQUATE CAPACITIES TO KEEP TRUCKS WORKING FULL-SHIFT...WITH NO LET-DOWN IN TRUCK POWER OR PERFORMANCE. USER COST RECORDS SHOW THAT EXIDE-IRONCLADS ARE YOUR BEST POWER BUY—AT ANY PRICE!



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EXIDE-IRONCLAD BATTERIES KEEP PASSENGER CAR LIGHTS BRIGHT AND STEADY...KEEP CARS COMFORTABLY AIR CONDITIONED EVEN DURING LONG STOPS.

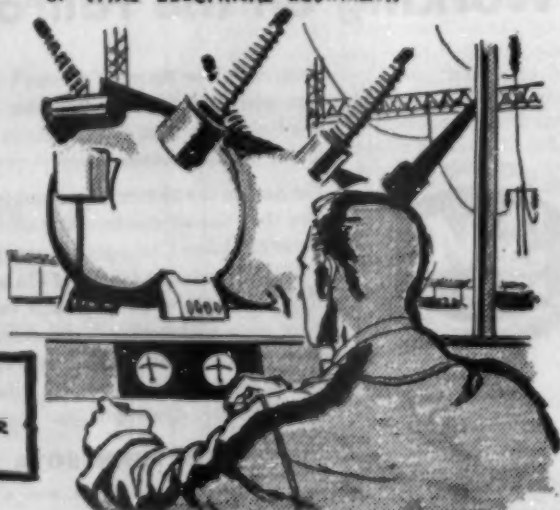
FLASH!

EXIDE INTRODUCES THE NEW EH EXIDE-IRONCLAD CAR LIGHTING AND AIR CONDITIONING BATTERY! IT SETS NEW STANDARDS FOR RAILWAY PERFORMANCE—GIVES FULL RATED POWER INITIALLY—FULL RATED POWER FOR A LONGER WORKING LIFE, WRITE FOR SPECIFICATIONS.

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THE GIANT-SIZED CIRCUIT BREAKERS REQUIRED TO CONTROL AMERICA'S TREMENDOUS, GROWING UTILITY POWER LOAD ARE BOTH TESTED AND OPERATED WITH DEPENDABLE EXIDE BATTERIES. EXIDE MAKES MANY BATTERIES FOR MANY INDUSTRIES...TO GUARANTEE INSTANT, POSITIVE OPERATION OF VITAL ELECTRICAL EQUIPMENT.



Exide INDUSTRIAL DIVISION, The Electric Storage Battery Company, Philadelphia 2, Pa.

WASHINGTON OUTLOOK

WASHINGTON
BUREAU
SEPT. 24, 1955



City folks should take note of what's happening down on the farm. Coming developments will make business news as well as political news. Decisions on details have yet to be made. But during the week there were signs of what the Administration has in mind to help farmers.

—•—

The White House plan will support income, not prices. Republicans have no idea of matching Democratic promises of 90% of parity prices.

Farmers will be paid to cut production. Theory is that Benson's flexible price support program won't work unless it is expanded to offer an incentive to take land out of production of surplus crops without diverting it to production of new surpluses of other crops. This is a change from Benson's earlier ideas—and will cost millions.

Production controls will be tightened at the same time. In order to qualify for payments, farmers will have to refrain from raising other crops on lands taken out of wheat, corn, or other surpluses. And they may have to accept marketing controls—limits on the pounds or bushels that can be marketed. That's because added use of fertilizer and heavy planting can defeat mere acreage limitations.

On the business side, all this means more dollars in the pockets of farmers. Aim is to reverse the downtrend in farm buying power and thus make agriculture a better customer for industry.

On the political side, the Administration will be protecting what many observers think is its weakest point. Democrats are whooping up the slide in farm income and prices as the sour note in the GOP theme of prosperity with peace. They hope to shift enough votes in a dozen Midwest states to pull off another 1948 upset. The Administration is frankly worried. So it is turning to more payments and controls.

—•—

This sounds like a return to the New Deal of the '30s. And, in a way, it is. Among Eisenhower's advisers, there's no enthusiasm for the shift. It is dictated by two major considerations:

- Continuing softness in agriculture might bring on a general business slide. This was a major influence in the bust of the late '20s.

- There is political danger for the GOP. Democrats see the possibility that they can exploit the farm vote to cut Eisenhower's popularity and make trouble for Republicans in close House and Senate races. So the GOP is "bending to the wind."

Take Benson's own words. He has announced that he will have something new for Congress in January. He didn't say what. But previously he had been willing to stand on his flexible price supports theory.

Then, there's the matter of pork. Benson announced that he would step in on the price side with government buying. This is the sort of thing Benson has been trying to avoid.

Vice-Pres. Nixon is in on the act. His line to farmers is that what the Administration really wants is 100% of parity. Eisenhower talked about 100% of parity when he was campaigning in 1952. His farm officials have spent a great deal of time explaining these comments. Now, Nixon stirs up the discussion again.

WASHINGTON OUTLOOK (Continued)

WASHINGTON
BUREAU
SEPT. 24, 1955

The Democrats have an obvious political advantage. Their spokesmen go all-out on promises, knowing that they can't enact any legislation next year unless the White House will go along with it. To the old promise of 90% of parity on basic crops—wheat, corn, rice, cotton, tobacco, etc.—they are adding poultry and livestock. And they, too, want to pay farmers for acreages withdrawn from production of surplus crops.

How bad off are the farmers? It just depends on the yardstick used. Gross farm income is down—from nearly \$37-billion in 1951 to a current annual rate of about \$33-billion. Net income is down even more—from some \$15.8-billion in 1951 to less than \$11-billion. This reflects the squeeze of sliding farm income at a time when expenses are rising. But take farm income on a per capita basis, and it isn't off so hard. There are fewer people on the farms. And the net worth of farmers is up—land values, equipment owned, etc. Then, too, the farm income statistics don't show non-farm income, which is a bigger and bigger factor.

A sidelight on farm politics: Usually, the annual farm outlook conference is held in October. This year, it will start Nov. 28, run through Dec. 1. At these conferences, experts from agricultural colleges get together with government officials for a big look ahead. It's an appraisal of general business prospects, with agriculture fitted into the picture. Here's the importance of the late November date: October puts the farm appraisal just ahead of the elections. The delayed session this year will set a precedent, to be followed in 1956.

Want to appeal a federal tax decision? Small Business Administration has just issued a new leaflet on how you go about taking the Internal Revenue Service into court if you feel unfairly treated. Copies are available at any SBA regional office. Or, you can write to Small Business Administration, Washington 25, D. C. Ask for "Appeal Procedure for Income Tax Cases." There is no charge.

The Air Force Survival School will go ahead, as usual, once the rash of "torture" stories has died down.

The reason—Air Force doesn't want to lose its investment in, say, a skilled, city-bred, navigator simply because the man doesn't know how to live off the land. The anti-brainwashing technique that goes with the training is only part of the story. What the Air Force is trying to do is assure maximum recovery of downed crews, whether downed on training flights or in combat.

How to cut defense spending without making political issues—is a hot question that the Pentagon is trying to answer.

Some ideas being advanced. The Navy has spent something over \$50-million of research and development funds to turn out a super three-inch gun. At the same time, it developed the "Terrier," a guided missile that outperforms the gun. Plan now is to avoid such duplications. There will be more standardization of arms. Example: The Air Force and Navy now buy eight different types of 20-mm. aircraft cannon and two types of 20-mm. shells. They will get together and save money on these items, as well as on other things.



Fosbond protection clinches sales for Servel

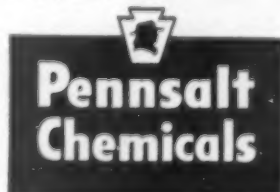
By bonding the baked enamel finish to this Servel gas refrigerator, Pennsalt's Fosbond® Process keeps rust and corrosion out for good . . . adds the final clincher to many a Servel sale.

All Servel refrigerators and air conditioners pass through a Fosbond cleaning and phosphatizing cycle. The results: Fosbond provides lifetime corrosion-resistance, "anchors" organic finishes to the base metal,

makes Servel appliances an even better buy. To top it off, Servel actually saves on finishing costs by starting with Fosbond.

How about *your* product? Are you looking for an effective yet economical way to boost its weatherability, its paint adhesion, its lasting beauty even under chemical and physical abuse? Look into Pennsalt's Fosbond Processes of zinc and iron phosphatizing for your answer. Write

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Living standards are high

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In Philadelphia, the percentage of owner-occupied homes is greater than in any other large city in America . . . greater than the national average. This single fact is of prime interest to industrialists and manufacturers, for they know the value of a stable and reliable working force. Workers who own their homes stay put, take pride in their community, live on neighborly terms, and build their careers steadily. And when, in addition to this important asset, you find nearby markets, easy access to raw materials, a modern airport, excellent rail and shipping facilities, and plenty of electric power now and for the future, you know why Greater Philadelphia is growing so fast, and offers so much promise. Have you picked your new location?



PHILADELPHIA ELECTRIC COMPANY

Serving the world's greatest industrial area, Delaware Valley, U.S.A.

How Consumers Take to Newness

The preoccupation of manufacturers and merchandisers with new products is by now a recognized part of postwar selling. Competition, tremendous productive capacity and skills, and aggressive merchandising techniques have pushed producers and marketers further into new lines, new models, and new features, brand new products.

Does the consumer—target of much of this activity—have as cogent reasons for accepting all these innovations as the manufacturers have for making them?

What are the basic situations in which he will buy a new product or a new feature (BW—Apr. 30 '55, p82)?

Can you pinpoint the kind of consumer who is likely to go for an innovation (table)?

Can you show any real correlation between innovations and changes in your sales curve?

What hazards lie in wait for the manufacturer?

Will the consumer continue to support the trend to newness? How can you make him continue?

• **Forum of Experts**—These were the questions that came out of a conference at Ann Arbor, Mich., sponsored by Consumer Behavior, Inc., last week. This group, organized in 1952, aims to promote basic research into how a consumer behaves and why. Supported mainly by corporate gifts (Consumers Union got it off to its start), it tries to pool the resources of psychologists, anthropologists, sociologists, economists, marketing research experts, and business to establish a true science of consumer behavior.

Last week, the problem it had set itself was consumer reactions to innovation and obsolescence. Representatives from such companies as Ford Motor Co., General Electric Co., General Foods Corp., Household Finance Corp., Goodyear Tire & Rubber Co., as well as from the universities and professional market research organizations, tackled the problem in a program where the theoretical and practical attempted to come to terms.

I. The Basics

On the theoretical side, Michael Halpert and Wroe Alderson, both of Alderson & Sessions, Inc., research consultants, set out to formulate the situations in which a consumer may buy something new. They indicated what

Which Customers Are Likely to Go for Innovations in Household Appliances?

By Income Group

- ☐ Under \$3,000 6%
- ☐ \$3,000-\$4,999 23%
- ☒ \$5,000-\$7,449 **39%**
- ☐ \$7,500 plus 30%
- ☐ No response 2%

By Age Group

- ☐ 18-34 years 28%
- ☒ 35-54 **58%**
- ☐ 55-64 10%
- ☐ 65 and over 3%
- ☐ No response 1%

By Family Status

- ☐ Single 8%
- ☐ Married, no children 20%
- ☒ Married, children **69%**
- ☐ Other 3%

By Financial Outlook

- ☒ Income up, expect rise. **27%**
- ☒ Income steady, expect rise **23%**
- ☐ Income steady, no change expected 19%
- ☐ Income unsteady, expect worse 15%
- ☐ Income up, no change expected 8%
- ☐ No response 8%

Data: University of Michigan Survey Research Center.

the merchandiser was up against in putting an innovation over, and how—broadly—he might hit a bullseye.

• **"Occasions for Purchase"**—They summed up the eight "occasions for purchase" in which a consumer acts. In all of these situations the consumer is presumed to have a "cultural inventory," indicated by the letters a to x, representing the whole range of products available for consumption. No one consumer is likely to own all the items, but he is aware of them.

The simplest kind of purchase occurs when a consumer buys x because he has run out of his supply of x. Or, tired of x, he may buy w—about which he already knows something.

With the third type, he gets right into the field of innovations. This is when x has failed him—and there's a new, supposedly better product on the market, say a better grade of gasoline. Or he may try an old product to which something new has been added—as TCP was added to Shell's gasoline.

Up to this point, the consumer has been thinking only in terms of improving an inventory he already understands. With the next step begins the task of persuading him that he should enlarge his inventory to satisfy wants he hasn't felt before. This occurs when the product is radically different from anything yet offered. It may be complicated by requiring a supplementary

new product. The new automatic washing machines, for example, brought forth a special detergent (BW—May 7 '55, p46).

Alderson and Halpert stressed the sociological aspects of the consumer's reactions to this kind of product. Some consumers will take to it because they are leaders; they want to be first to own the latest. Others are followers; they will hang back till the innovation has made some headway. This is a phenomenon that every new appliance manufacturer and every fashion creator is well aware of.

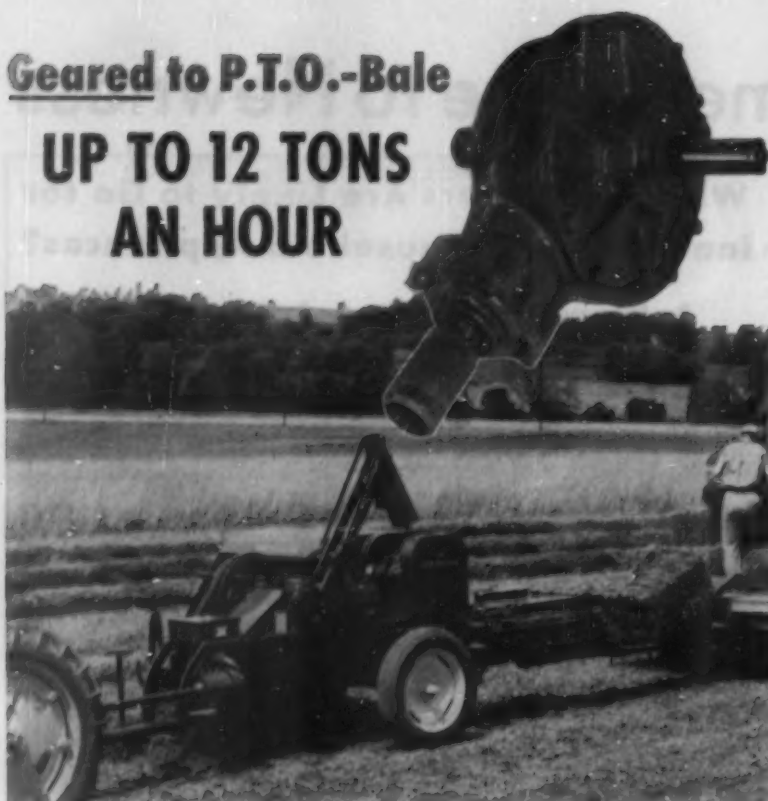
• **Making Consumer Bite**—Given these basic situations, how do you get consumer acceptance of an innovation? The consumer has two bases for choice: the product itself, and the claims made for it.

On the product, say these experts, the differences between it and an established product must be discernible. The product must be identifiable. And it must be reproducible.

On the claims, ideally they should be meaningful, plausible, and verifiable. In effect, a new product is "an offer to solve a problem"—often a problem the consumer hasn't been aware of. How meaningful the product can be made depends on the urgency of the problem and how much doubt the consumer has that the product will meet the contingency. He might ask, for ex-

Geared to P.T.O.-Bale

**UP TO 12 TONS
AN HOUR**



thanks to **BORG-WARNER engineering**

That's a lot of hay, no matter how you bale it. Yet New Holland's new "Super 77" power take-off baler for 3-plow tractors is as easy to operate as any engine powered baler.

Ordinarily, high-speed baling involves punishing shock loads throughout the take-off system. But with the special gear-box and over-running clutch designed by Borg-Warner's Warner Automotive Parts Division, the "Super 77" P.T.O. clicks off the bales smoothly, effortlessly. The farmer has complete control of the entire baling operation. And he can safely shift tractor gears at will to synchronize ground speed with baling speed for continuous high capacity.

Rugged, efficient Warner Automotive gear-box assemblies, individually designed, fit a wide variety of agricultural needs—in combines, corn pickers, rotary cutters, post hole diggers, spreaders.

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WAUSAU MFG. CO. • WESTON HYDRAULICS, LTD.

**"... even owners of fairly
new appliances, in good
condition, are responsive to
new features ..."**

INNOVATIONS starts on p. 41

ample, whether he really must have a color TV, how often he will watch it, how much added pleasure it will give him—and whether it will do the job.

If the manufacturer can establish the meaningfulness of an innovation, the next step is to make the claims plausible. Here the three forces to work with are credulity, authority, and scientific proof. If the product is replacing an old one, the consumer has the old one to use as a yardstick to measure the new. If it is a radical innovation, he will judge it on the basis of claims: Does it come up to its advance billing?

• **The Stress Varies**—Different kinds of innovations require different stresses. In a simple improvement, it is particularly important that the difference between the old and the new be discernible; otherwise there's no excuse for it. In cases of adding a new element, identifiability is important—as when water softener is added to a soap. In utterly new products, product claims must take a big share of the sales task. Convincing the consumer that he wants the new offering is the marketer's big job.

II. Who Reacts?

Eva Mueller, of the University of Michigan's Survey Research Center, got down to cases in attempting to pinpoint where the innovations market is likely to be found. She stressed that her findings so far are tentative, in some cases the survey sample was too small to be statistically significant. But the findings pointed to some interesting clues (table, page 41).

• **Income Factor**—First, up to a point, interest in new features on household appliances—and in the newer appliances—grows with income. On a basis of 2,027 families surveyed, only 30% of those in the under-\$3,000 group expressed an interest in new features; 40% of those in the \$3,000 to \$4,999 group did so; and 45% did in the \$5,000 to \$7,499 group. There was a slight drop-off in the \$7,500 and over bracket—possibly because this is the group that is most likely to have the newest anyway.

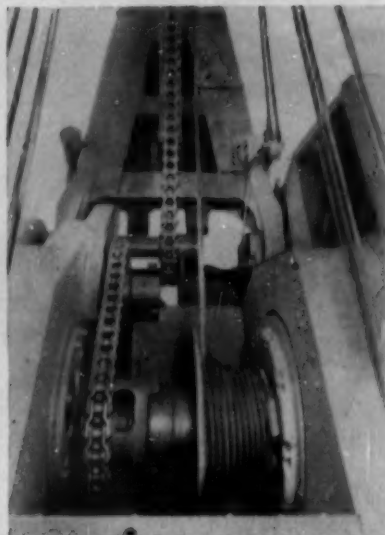
The study indicates that even owners of fairly new appliances, in good condition, are responsive to new features—though here the number of cases was small. Last June, 19% of the people who had refrigerators not more than

What's new in MECHANIZATION ?



One does the work of four. This 35-ton Jeffrey Colmol cuts and breaks the coal from the mine face and delivers it to the "out-going" transportation system at rates as high as 100 tons per man-shift. This continuous mining machine does the work of four conventional operations: cutting, drilling, shooting and loading . . . to help keep costs down.

Thinking about automation? You should see some of the latest foundries! Materials are being moved and processed like clockwork . . . at the push of a button. Did you know Jeffrey is the leader in this field? Our service includes not only unit machines but completely engineered foundry systems such as shown.



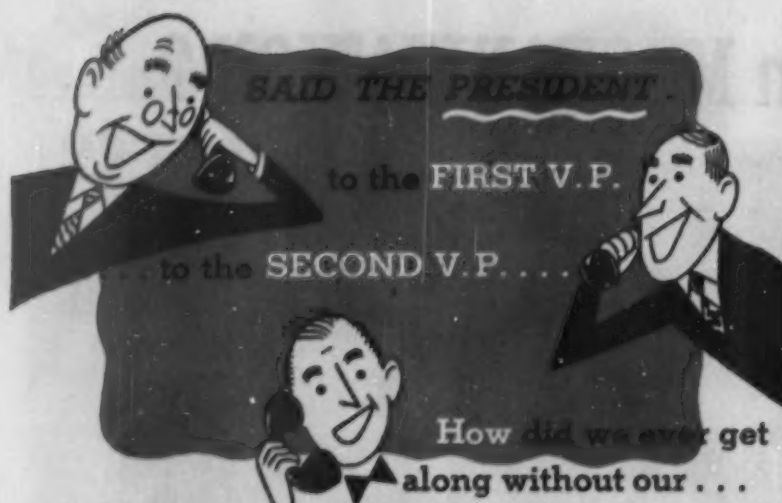
Chain on the move! You're looking at the crowd drive of a power shovel . . . and at a trend in power transmission. More and more machinery builders are changing to chain for positive drives, simplified designs and low-cost performance . . . and are looking to Jeffrey for the exact chains and sprockets for the job.

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. . . and with a contract engineering-manufacturing
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WHEELER SOUND POWERED *Electric* TELEPHONES

How convenient it is to have a direct "private line" to key associates... in addition to your regular telephone and intercom. Saves time, saves steps, relieves switchboard. **NO BATTERIES.** No outside power. Smart executive cradle phone instruments. Easily installed. Low first-cost. Write for Bulletin SA-32.

The WHEELER INSULATED WIRE COMPANY, INC.
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BRITISH EUROPEAN AIRWAYS

"... innovation-mindedness seems to correlate with how a consumer feels about his financial status..."

INNOVATIONS starts on p. 41

five years old and in good condition planned to replace them; 23% of those who bought in the last year had had such refrigerators.

New features apparently helped spark this interest. A resurvey of 855 respondents who owned a fairly new refrigerator (five years or less) showed that 5.5% who had expressed an interest in new features had bought in the following year; only 1.9% of those who had expressed no interest had bought.

• **Gauging "Innovation-Mindedness"**—The study came up with a kind of gauge for "innovation-mindedness." This was based on the interest expressed in the latest features on traditional appliances, on the ownership of plans to buy the newer appliances (garbage disposal units, home freezers, air conditioning, for example), and on the consumer's evaluation of the new ones as "useful," or merely "luxury" items. On this basis, the study finds that the great bulk (58%) of the innovation-minded consumers fall in the age group 35 to 54; that those families where there were children were most receptive; and those who had a high school or college education responded the most.

Significantly, the degree of innovation-mindedness seems to correlate directly with how a consumer feels about his financial status. The largest chunk (27%) of those who were innovation-minded fell in the group whose income has been going up and who expect further improvement; next largest (23%) were among those whose income has been steady and who expect to do better. Those with less cheerful prospects were less eager for the new.

III. Will It Last?

If these findings continue to hold up under further investigation, all this has important implications for business. Apparently, whether the trend to new things continues depends to a considerable extent on how prosperous people are, or think they are going to be. That a fairly recent acquisition of a new appliance doesn't discourage interest in still newer features seems to push further into the background that old bogey, saturation—as so many manufacturers have hoped it would.

Findings from Robert Eggert, marketing research manager of the Ford division of Ford Motor Co., point in the same direction. They credited the major model changes throughout the



TO QUIET LARGE AREAS of this Kansas City office building, ceilings of Armstrong Cushiontone have been installed. A perforated wood fiber tile, Cushiontone is surprisingly low in initial and maintenance costs.

How Much Should Sound Conditioning Cost?



BEAUTY AS WELL AS QUIET was required in the president's office of the Berles Carton Corp., Paterson, N. J. Here, a handsomely finished ceiling of Armstrong Travertone provides both at moderate cost.

Today's acoustical materials offer wide range of prices

No longer is the choice of sound conditioning restricted to just a few materials of similar design and price. Today, many types of noise-quieting materials are available, costing anywhere from \$0.25—little more than a plaster ceiling—to around \$1.00 per square foot installed.

As in the case of most building materials, the price of sound conditioning is not based on its effectiveness alone but rather on a combination of special product features, such as appearance, incombustibility, or ease of maintenance. Even the most inexpensive acoustical material can do an excellent noise-muffling job.

To give you a wide range of prices and other characteristics in selecting your own sound-conditioning ceiling, the Armstrong Cork Company makes a complete line of acoustical products. Besides adding valuable quiet, these materials often contribute distinctive beauty to an interior, provide extra

fire-safety or moisture control, and simplify maintenance.

These ceilings are always installed by Armstrong Acoustical Contractors . . . men who are fully qualified to help you choose the right acoustical material for your own noise problem. And because they carry the full line of Armstrong acoustical products, their advice is always unbiased as to the relative merits of each material.

Get full details on Armstrong sound conditioning by sending for the free new booklet, "Quiet at Work". Just write Armstrong Cork Company, 4209 Indian Road, Lancaster, Pennsylvania.

Armstrong

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Cushiontone® • Travertone® • Arrestone®

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"You call this a 'rat trap'?"



Strange name maybe. But that's what packaging men have labeled this ingenious corrugated pad. The name doesn't mean anything... It's just that the pad looked like the originator's idea of a rat trap. The pad fits snugly inside an H & D shipper, braces corners and suspends the product.

Of course, that's just one of the tricks up H & D's experienced sleeve... all designed to give your product the most protection at the least expense. Mind if we show you how?



HINDE & DAUCH

Division of West Virginia Pulp and Paper Company

AUTHORITY ON PACKAGING • SANDUSKY, OHIO
12 FACTORIES • 40 SALES OFFICES

automotive industry with a great part of this year's unprecedented car output and sales. Specifically, he cited the case of the 1952 Ford—the first year in which it used a one-piece windshield. Some 17% of Ford owners mentioned visibility as one of the features they liked that year—whereas competitor A, with the traditional windshield, rated only 2% mentions for visibility. Significantly, Eggert reported, next year, when the competitor also had a one-piece windshield, only 2% of Ford owners mentioned visibility.

• **Incentives**—Eggert added these factors as terrific incentives to change: rising births, the active market of teenagers, increased leisure.

In the U. S., especially, strong winds are blowing to make the trend to innovation prevail. Harvard's Samuel A. Stouffer pointed to some: the technological development of recent years (including credit selling); the country's immense area, the consumer's mobility. Stouffer earlier had cited the rapid post-war new family formation as an important stimulus to breaking with tradition (BW—May 21 '55, p140).

Both Robert Giraud of the University of Geneva and George Katona of the University of Michigan's Survey Research Center pointed out that in Europe the pressure has traditionally been in the other direction. There the consumer wants quality and permanence.

• **Difficulties**—But there were plenty of warnings that the road to progress is rugged. Arthur C. Nielsen, Jr., of A. C. Nielsen & Co., pointed out that among companies he had studied, 10% found it took from three to four years to reach a point where they felt that a new product was going to take; 30% reported two to three years; only 10% said it took less than six months.

Nielsen granted that a new product takes hold faster today than in the past—thanks in good part to television. But he quoted one major manufacturer who reported that only one in 20 of its new products, technically sound though they were, made the grade. A large advertising agency estimated that two out of three fail (BW—Feb. 12 '55, p50).

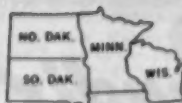
At the manufacturing level, though, competition and a highly developed merchandising setup put the heat on. At the consumer end, says Nielsen, the high level of discretionary spending means that most consumers can shift their preferences as they wish.

Further, he pointed out, the advent of a new product almost always cuts into sales of the old, at least for a while. Finally, he warned of inadequate testing of a new product—a warning that was repeated by Alfred Politz, of Alfred Politz Research, Inc. Politz took a broad cut at the limitations of the so-called "depth interview." **END**



For hire in the Upper Midwest

Production-minded research workers



This man is a *research* physicist—working on a *production* problem. Inside that apparatus, he's "growing" a germanium crystal (used to make electronic transistors) to find a short cut to transistor production. Trained to think in terms of production—as well as pure research—he's typical of the Upper Midwest's great pool of research people.

This training shows up clearly in the research leadership of the big-name industries settled here—electronics, abrasives and adhesives, for example.

His background, too, is representative of so many Upper Midwest people. His physics degree was earned in his state university. Last year, the Upper Midwest's 133 universities and state colleges awarded degrees in science to more than two thousand young people, to

again enlarge this reservoir of research talent.

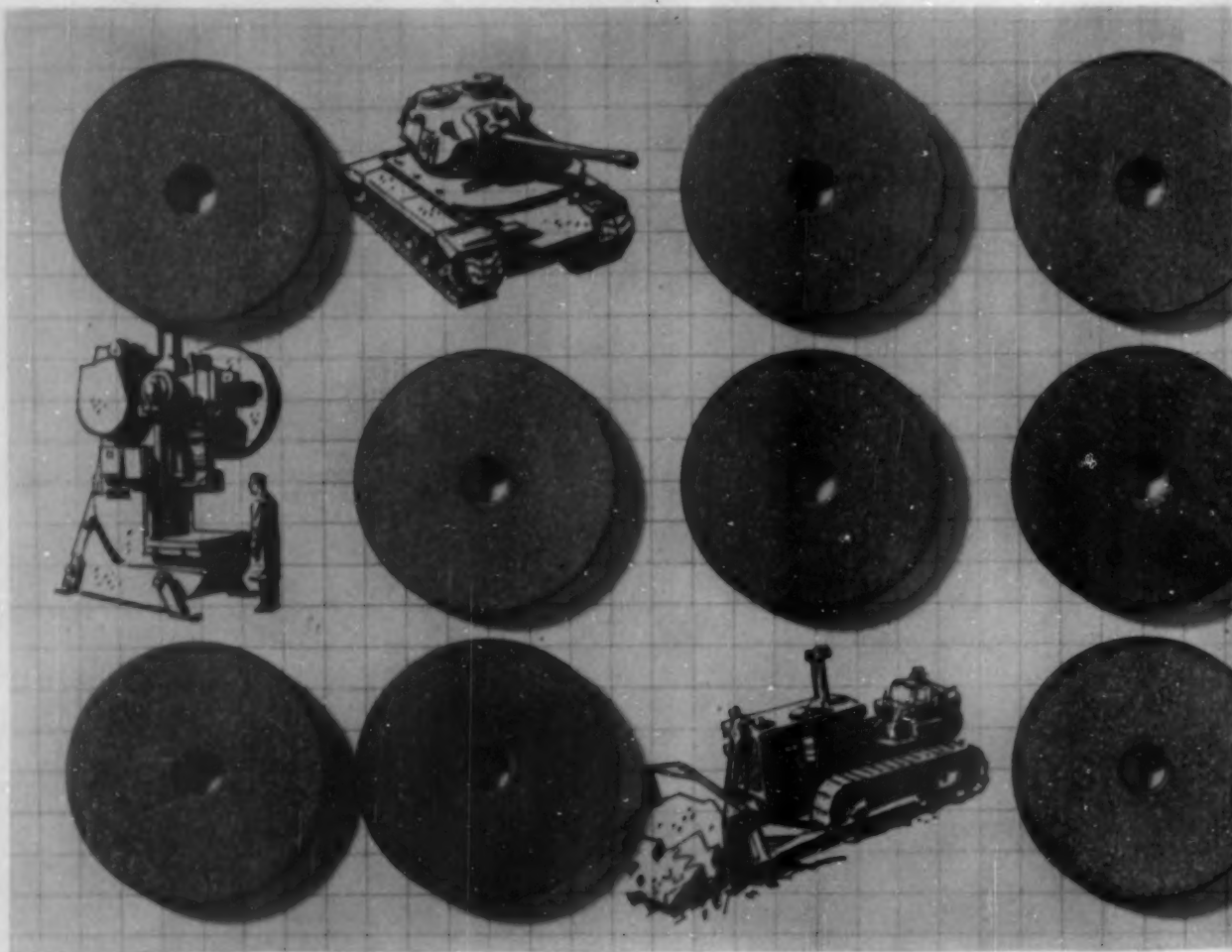
Also typical of Upper Midwest workers: one of the nation's lowest absentee records. One of the highest educational averages. One of the lowest accident records. Among the very highest credit records.

This man knows how to relax, too. Off the job he fishes in the nearest of the 19,000 lakes in this area—from his own boat in summer, through the ice in winter. Or hunts pheasants, ducks, deer, bear—in some of the world's greatest wild-life territory. Or whittles down his handicap on one of this area's 470 golf courses.

If you're looking for a new business location, you should know more about the skills of Upper Midwest people. Write our Area Development Department. All correspondence is confidential, of course.

Upper Midwest people know how...and prove it!

NORTHERN STATES POWER **NSP** COMPANY, Minneapolis 2, Minnesota



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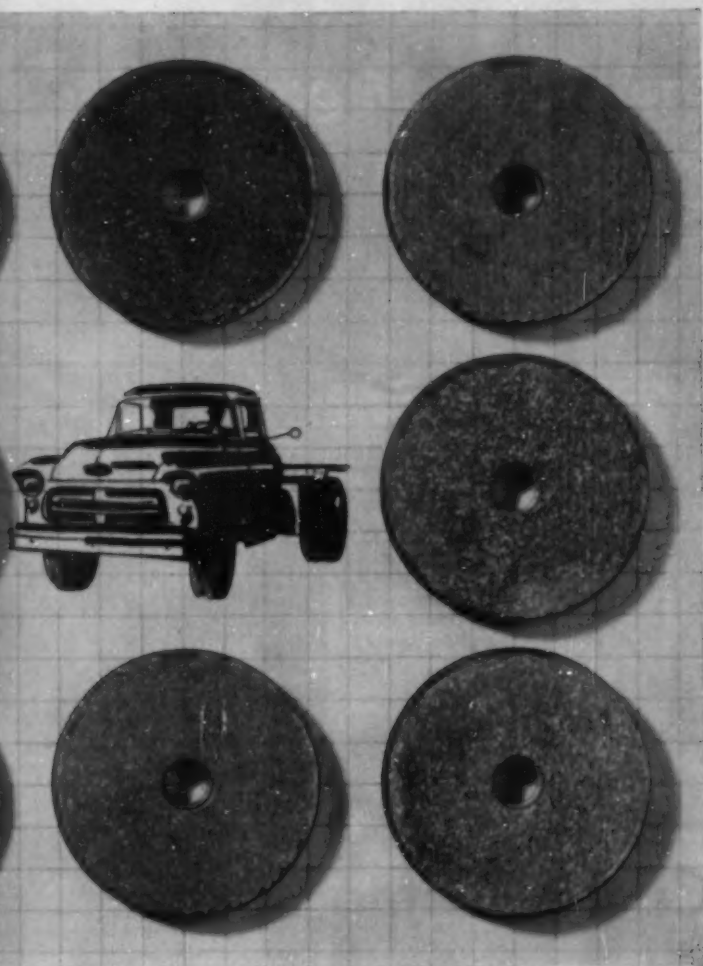
*Airplane brake
equipped with
Cerametallic brake
lining*

THIS new ceramic-base friction material was originally developed and produced by Bendix to solve a particular problem: to withstand the extreme heat generated when stopping fast jets and heavy commercial airliners. It is now available for other applications.

This is important news because Cerametallic lining has many advantages where there are extra-tough jobs for friction material. It lasts five times longer than ordinary lining eliminating that much downtime expense. It allows

twice the friction load; that is, it doubles the capacity of a brake or clutch because it is not affected by heat.

Cerametallic currently is being used with great success on clutches and brakes for heavy-duty trucks and off-the-road equipment and industrial presses and machine tools. As the illustration shows, it comes in the form of discs or buttons for quick attachment to the clutch plate. The friction surfaces will not glaze, but will retain their original coefficient of friction



material for aviation brakes clutch and brake jobs!

over a wide range of temperatures down to the last usable thickness of the material.

In line with our expansion of Cerametallic applications, new equipment and enlarged plant facilities at our Marshall-Eclipse Division, Troy, N. Y., have been built to accommodate increased demand.

For particular details or answers to individual problems, contact the above division.

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TRADE MARK



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guided missiles.

UTICA, UTICA, N. Y.
aviation components.

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instruments; flight and navigation instruments;
components for servo-mechanism and computing
equipment; stabilization equipment; foundry products.

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airborne radar; ultrasonics, missile guidance; sonar.

PIONEER-CENTRAL, DAVENPORT, IOWA
aviation components; oxygen equipment;
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CINCINNATI, CINCINNATI, OHIO
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The Cutter Sales Story

Sales in Millions of Dollars



Source: Cutter Laboratories; MULTIPLE WEEK Times



Can Cutter Come Back?

Before the mass polio vaccine inoculation program started five months ago, Cutter Laboratories, Inc., of Berkeley, Calif., was known generally only by the customers it supplied directly—surgical supply houses, drug wholesalers, pharmacists, hospital supply buyers, and doctors. And in this circle, the 58-year old company had built up a solid reputation for integrity and responsibility. Its impressive sales record (chart) was evidence of its high standing in the drug field.

Because of its long experience as one of the top manufacturers of injectible drugs—serums, vaccines, intravenous solutions, and similar products—Cutter became the first of six U. S. manufacturers to ship the new Salk polio vaccine. And, as a result, it became known to the general public almost overnight as the manufacturer of vaccine containing live virus that was reported to be infecting an alarming—though relatively small—percentage of children with the dread disease.

• Staggering Blow—The company's prestige suffered a severe blow. Marketing men agree that it would have taken much less than this staggering setback to finish off a smaller company. But

right now it looks as if Cutter will recover and, in the long run, perhaps even strengthen its position in the drug field.

Cutter's troubles began on April 25, at the peak of the mass inoculation program, when the first child injected with its vaccine came down with polio. When more cases developed the company withdrew all of its vaccine. The U. S. Public Health Service ordered an investigation, but did not give a full report on its findings for four months.

Meanwhile, children injected with vaccine made by other manufacturers also developed polio—including the so-called "coincidental" cases. A shadow was cast over the whole program. Parents, anxiously hoping the new vaccine would erase the threat of polio, were confused, apprehensive, and disappointed. Charges of mishandling were leveled at the government.

• Scapegoat—But in the public mind the main scapegoat was Cutter. An expose magazine blared a story headlined "The Criminal Record of Cutter Labs," and some irate parents filed damage suits against Cutter.

Last month the government issued its official report on the Cutter incident (BW—Sep. 3/55, p. 32), clearing the com-

Serving Many Different Industries

in many different ways

These brief reports indicate the many diversified businesses and industries which Ebasco assists with a wide range of services



AUTOMOTIVE

- Assumed responsibility for complete organization survey for leading manufacturer—from purchasing through design, production, assembly, sales and management.
- Recommended ways to reduce costs, increase efficiency, boost production and sales.



BANKING

- Conducted study of a business which was vital in assisting a New York bank to make an important decision.
- Planned expansion of facilities for Southern bank.
- Made an organization and management study for a major urban bank.

CHEMICALS

- Made detailed study of potential market for a new product of a manufacturer.
- Made appraisal of equipment and plant for a Southwestern firm.
- Developed a comprehensive group insurance program for a dye works.



FOOD

- Developed a comprehensive insurance program for a Florida orange juice processor.
- Made a job evaluation study for a quality baking company.
- Prepared a detailed space planning study for a large syrup producer.



PIPELINES

- Conducted economic study and assisted in the financing of a proposed crude oil pipe line and a refined petroleum products pipe line.
- Performed general consulting, engineering, insurance and space planning services for a large Southwestern company.



RAILROADS

- Prepared management development program for a large Eastern road.
- Made economic and financial study of a Midwestern road's properties.
- Analyzed and made recommendations for revamping of a company's accounting systems and methods.

FROM A TO Z

Here is a partial list of the large and small businesses and industries which have made use of Ebasco's wide range of services.

Airlines	Newspaper Pubg.
Banking	Oil
Chemical	Pulp and Paper
Dept. Stores	Quartz and Glass
Exporting	Railroads
Food	Steamship lines
Garment Mfg.	Textile Mfg.
Hotels	Utilities
Investment Firms	Valve and Pipe Mfg.
Jobbing	Wire and Cable Mfg.
Kraft Pulp Mills	X-Ray Equipment Mfg.
Lumber	Yarn and Fiber Mfg.
Machine Tool	Zinc and Mining

"The Inside Story of Outside Help" describes Ebasco services and how they may be of use to you. For a copy, write Ebasco Services Incorporated, Dept. C, Two Rector St., New York 6.



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Some of Ebasco's Services are listed below:

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Design & Construction • Financial & Business Studies • Industrial Relations
Insurance, Pensions & Safety
Purchasing, Inspection & Expediting
Rates & Pricing • Research • Sales & Public Relations • Space Planning
Systems, Methods & Budgets • Tax
Washington Office





Speed truck deliveries with Ozalid copies...

Truck drivers often wasted hours waiting for invoices.

Deliveries were delayed, customers complained...

Now this food manufacturer uses a translucent order form, hand written. Terms, route, invoice number, prices and extensions are entered on the form. And *Ozalid* copies serve as invoice, packing slip, delivery receipt, sales records.

Trucks are hours ahead of their old schedules. Delivery control is improved, errors avoided, invoicing time and costs greatly reduced.

In your own company, you can find any number of *Ozalid* applications which will do away with retyping, and copying on cumulative records and reports, order filling and purchasing. *Ozalid* speeds paperwork, saves time, frees employees

for more productive work.

An *Ozalid* machine will copy anything written, typed, printed or drawn on any translucent (lets light through) material—without photography. Reproduction is instant. A letter size copy takes less than a minute, costs less than 2¢—faster and cheaper than photocopying. And anybody can use an *Ozalid* machine.

Ask the nearest *Ozalid* distributor (see phone book) to show how *Ozalid* can help you. Or write 82 Ozaway, Johnson City, N. Y. In Canada, Hughes Owens Co., Ltd., Montreal.

OZALID—A Division of General Aniline & Film Corporation . . . From Research to Reality.



OZALID

OZAMATIC (left) is a table model, handles sheets as wide as 16", and can make up to 1000 prints an hour.

pany of any responsibility. The government laid the blame for the imperfect vaccine on inadequate safety standards and control tests it had set up. It was pointed out that Cutter had been the first to ship the new vaccine, and that later polio cases developed after children were injected with vaccine made by other manufacturers.

But the damage to Cutter had been done. The company's sales for the first half of 1955 slipped to \$6.5-million, a drop of \$1.3-million from the corresponding period in 1954. Profits, after taxes, skidded from \$324,000 for the first half of last year to \$73,000 for the first six months of this year. Cutter stock took a nosedive from \$15 a share to \$8.75. And a new issue of 140,000 shares that Cutter had registered with Securities & Exchange Commission was quickly withdrawn.

To understand why these adversities didn't finish off Cutter, you have to examine the company's relatively obscure past history and market.

• **The Faithful**—Customers for Cutter's prescription-only products are scientifically trained people who have been dealing with the company for years. And these doctors, pharmacists, and drug buyers realized that what happened to Cutter could have happened to anyone. Their faith in the company was not shaken. Only one instance was reported of a hospital covering up the label on Cutter's regular products.

As a matter of fact, Cutter's regional offices have been sending in encouraging reports on sales—even at the time the company was getting a black eye for its polio vaccine. The company says sales of its other products—blood fractions and expanders, hospital solutions, veterinary products—are up. They are surpassing not only last year's levels, but also those estimated for this year.

Regular customers have not been alone in rallying to the support of Cutter. Competing drug companies refused to discuss the polio scare and told their customers that Cutter was a fine company. At the peak of the unfavorable publicity, San Francisco's American Trust Co. increased Cutter's open line of credit.

• **Vote of Confidence**—In June the company got a vote of confidence from the trade when the American Pharmaceutical Manufacturers Assn. switched its plans and elected Dr. Robert K. Cutter as its president. He is the oldest of the three brothers who run the company.

And, oddly enough, though Cutter stock sank, the number of stockholders almost doubled in five months from 965 to something over 1,800.

Despite this expression of confidence, Cutter isn't out of the woods yet. The company, which has about \$2-million tied up in Salk vaccine, will lose virtu-

How much can you save with a General Electric locomotive?



G-E LOCOMOTIVE SAVES WORTHINGTON CORP. \$12,036 A YEAR—MORE THAN A 30% RETURN

Here's how one company discovered the savings that can be realized by converting from older motive power to an efficient G-E diesel-electric:

1. Three years ago, General Electric engineers surveyed the motive power needs at Worthington Corp.'s Harrison (N. J.) plant.

2. On the basis of this survey, Worthington decided to replace its steam locomotive with a modern G-E 45-ton diesel-electric.

3. Since Worthington's 45-tonner has been in operation, records show an annual saving of \$9536 in fuel and between \$1800 and \$2700 in maintenance—more than 30% gross annual return on investment.

J. J. Summersby, Vice President in Charge of Purchases and Traffic at Worthington, sums it up

this way: "The performance of our G-E diesel-electric has exceeded every expectation."

In any industrial haulage job, you get the most economical and efficient performance from a locomotive designed specifically for industrial service. One of the six standard G-E sizes, from 25 to 80 tons, will meet your requirements. For a survey, contact your G-E Apparatus Sales Engineer or write for the bulletin "Switch to Diesel-Electrics and Save" to Locomotive and Car Equipment Dept., General Electric Company, Erie, Pa.

130-75A

GENERAL  ELECTRIC

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"LEADERS IN PHENOLIC PLASTICS"

ally all of its polio vaccine sales for the year—it hasn't yet asked the government to clear its batches produced under the new control standards. In addition, the government canceled contracts for gamma globulin (since the Salk vaccine supplanted it) and also for Dextran, a blood plasma expander.

• **Cutback**—To offset part of the sales loss, Cutter's president, Dr. Robert Cutter, took a big hitch in its corporate belt. He told all departments to cut into both the fat and muscle of their budgets.

To replace the capital it expected to raise through floating a stock issue last spring, Cutter last week borrowed \$3-million from Mutual Life Insurance Co. of New York.

• **Big Plans**—But perhaps the strongest indicator of Cutter's determination to come back stronger than ever are its plans for the future. The company is planning to expand and is readying new products for distribution to customers. It even expects to purchase other small companies to round out its line of products.

The company expects to ask government clearance when this year's polio season is over. (It doesn't want to take the chance of any "coincidental" cases this year.)

• **Calculated Risk**—Cutter realized it was taking a gamble on the new Salk vaccine to begin with. Last February, Dr. Robert Cutter told stockholders: "Around the middle of the year you are going to look on this decision [to make the vaccine] as being very dumb or very smart, depending on how poliomyelitis vaccine turns out."

The whole incident of the Cutter vaccine is not unlike what happened a few years ago to Sterling Drug's Fletcher's Castoria—a laxative for children. Some contaminated batches of the product slipped into commercial distribution, caused illness and even a few deaths among its users. Sterling immediately withdrew all its Castoria from the market, took full page ads in the press to warn mothers not to buy any of its product. The goodwill gained from this move pushed sales of Castoria up when it came back on the market.

• **Long-Range Gain?**—Trade observers think that the long-range effect of the recent publicity may make the Cutter name a household word for the first time and that the company may be able to capitalize on it after the vaccine affair has been forgotten. Cutter now makes only two consumer products—a snake bite kit and a poison ivy remedy. But when the company brings out new products the public should recognize the name on the label more readily.

So the final result of a near-catastrophe may even be to open up a new market for Cutter—the consuming public. **END**

Swamped

by a raft of rejects?

**Instrumentation can help
keep up your quality standards...**

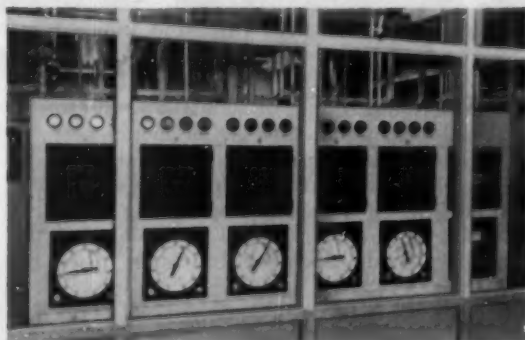
WITH the right kind of automatic controls, you can reduce rejects to a minimum. Modern instrumentation increases quality and productivity... frees valuable manpower for other important duties. And complete, accurate records tighten up cost accounting... point the way to decreased unit costs.

Modernizing? Instrumentation is excellent protection for your present plant investment.

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Honeywell, pioneer in controls, offers the most comprehensive line in the industry, together with a nationwide application and service organization. Ask your nearby Honeywell sales engineer how modern controls can protect product quality in your plant.

MINNEAPOLIS-HONEYWELL REGULATOR Co., Industrial Division, Wayne and Windrim Avenues, Philadelphia 44, Pa.



Instrumentation cut rejects by 38% in making plastic key tips for business machines at The National Cash Register Co., Dayton, Ohio. Accurate Honeywell temperature control on plastic molding presses has paid for itself many times over—in product quality, quantity and uniformity.



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Honeywell
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Write for a copy of "Instrumentation for Cost Accounting"



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with care!



Dangerous? Obviously so, and you take precautions. But not so obvious, and just as dangerous, are the hand hazards that threaten the average industrial worker. Plant men the nation across—realizing the importance of hand safety to productivity—protect workers' hands with Jomac® Work Gloves. Made from tough, resilient fabric, Jomacs cost less because they wear longer and can be cleaned over and over. Our new catalog shows the *right* glove for your workers, whatever their job. Write for it today.



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of Jomacs. Describe your operations, temperature conditions, etc. We'll gladly recommend an economical Jomac Work Glove and send you a sample pair. Jomac Inc., Dept. A, Philadelphia 38, Pa.

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FTC May Probe Allowances

By Dress Manufacturers

An industrywide probe of dress manufacturers' advertising and promotion allowances may be in the works at the Federal Trade Commission.

Last week, an FTC hearing examiner gave the full commission what amounted to a bawling out for hitting the promotion allowance practice of a few makers, while leaving dozens of others "apparently free to continue" one-sided favors to some customers.

Promotional and ad allowances are the bonuses that manufacturers in some trades give their retail buyers to help push their products and to share local ad costs. The Robinson-Patman anti-price-discrimination act says these must be on a "proportionately equal basis" to all customers.

The examiner's blast came during hearings on one of FTC's three cases against dress makers accused of favoring some customers over others. This one cites Henry Rosenfeld, Inc., of New York City.

The examiner found that—as in the Rosenfeld case—practically all manufacturers in the field grant their PM's on a shifting, unpublishized and individual basis, at the whim of the seller.

• • •

Stainless Steel Tableware

Seeks Slice of Sterling Market

Stainless steel tableware is out after the markets not only of silver plate, but also of sterling silver.

At least that's how one stainless manufacturer—the Imperial Knife Co.—sees its new marketing arrangement with Chas. D. Briddell, Inc., makers of Carvel Hall brand cutlery and tableware.

Imperial will turn out a complete line of dinnerware sets to be sold under the Carvel Hall name through Briddell's sales offices and distributors to jewelry and department stores. Briddell's Carvel Hall line has been silver plate, but nearly four years of consumer research convinced Briddell stainless is the coming thing.

The new line is named Leisure. It will sell at retail prices considerably under sterling, more expensive than some plate, cheaper than other.

• • •

Buying Power Tools on Time

Set Up on Nationwide Basis

Now you can buy a home power tool on installment credit as easily as you can fly on travel time payment plans.

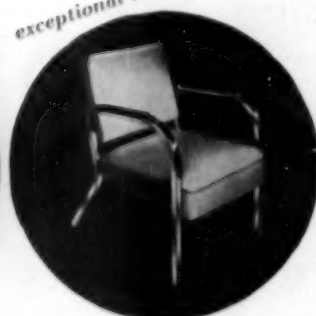
In fact, the same finance company worked out both plans—an extension of credit into comparatively small-potato items, moneywise (under \$500). Pacific Finance Co. of Los Angeles, which pioneered air travel time payment plans, has worked out a national "Tool Time" plan for Magna Engineering Corp.'s



first class beauty

express efficiency

exceptional mileage



We travel with almost every business and profession in America...

Yes, *Royal* is proud to serve them all. Take the chair on the right above, for example. We developed it for the Topeka State Hospital to some unusual specifications that wouldn't have occurred to anyone outside the medical profession. Now called the "Topeka" chair, it is used in every major mental institution. What's more, the knowledge that developed this chair, has also helped us make better posture chairs and hydraulic beauty chairs like those above, and furniture for such far-afield businesses as restaurants, factories, retail stores, offices and hotels.

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METAL FURNITURE SINCE '97

ARGON

The Cinderella Gas of Modern Industry

In a very few years argon has changed from a virtual "unknown" to a widely used necessity for many manufacturing processes. Industry's volume requirements for this gas have leaped to astounding totals . . . and its use is only beginning.

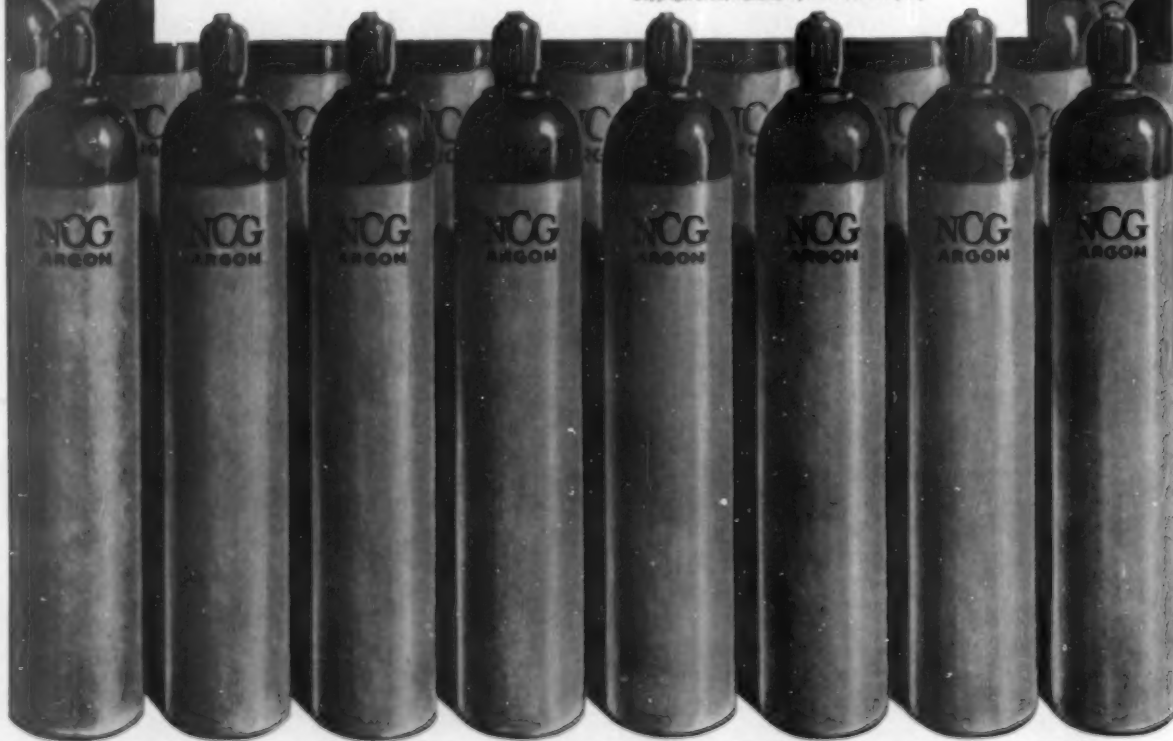
For one thing, argon has replaced helium to a large extent as the inert gas in shielded welding. Next, argon is ever more widely used for inert furnace atmospheres and as the purging agent in the electronic parts and powder metallurgy industries. But most important for the future of argon, it plays a key part in both the production and fabrication of the new wonder metal, titanium. Millions of dollars are being invested in new plants to

produce it and the demand for argon will soar as these plants get into production.

Alert manufacturers requiring argon for their operations are now taking steps to assure its dependable supply. They are anticipating their needs and the relationship which will exist between argon supply and demand in the future. Why don't you too gain the security of an NCG Argon supply contract? In cylinders or in bulk. Write or wire today.

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Shopsmith home power tool dealers.

It works like this. Pacific sends Shopsmith dealers across the country a check-list with which they can rate the credit risk of customers on the spot as they come into the store. The list includes key questions to ask the customer.

The answers are weighted; if the customer scores 25 or better, he's in. The dealer simply mails the forms to Pacific, which takes over full responsibility.

What makes Tool Time unusual is its national flavor. The National Retail Hardware Assn. has urged its members to set up their own local time credit plans for customers, says some 4,000 stores expect their plans to add \$750-million to total sales this year.

• • •

New Segmentation

Tried by CBS Radio

Radio networks are still looking for a workable advertising setup.

In Detroit last week, Columbia Broadcasting System announced a new "segmentation" formula which allows advertisers to sponsor 5 min. time segments of its regular program strips, such as Bing Crosby, Tennessee Ernie, and Edgar Bergen shows at \$2,100 each. Previously time was sold only in 15-min. chunks.

Meanwhile, some National Broadcasting Co. affiliates are disturbed over the net's plans to extend its weekend Monitor to programing to week-days. They say the rates are too low, and national advertisers don't get enough audience from it.

• • •

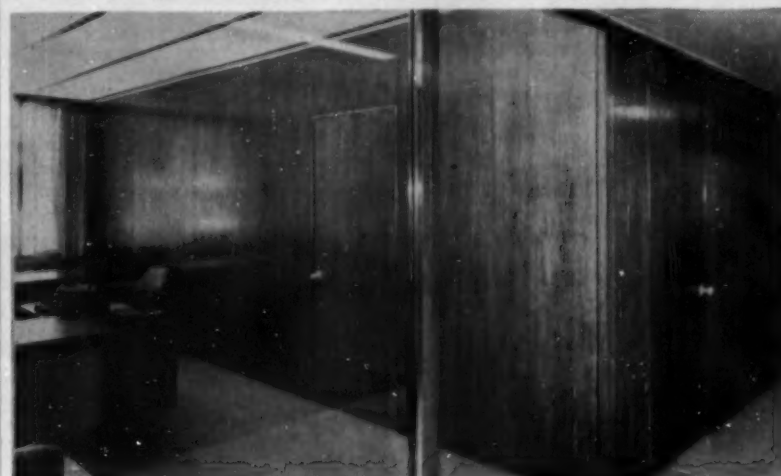
Marketing Briefs

Quick freezing has given birth to the first nationally distributed line of bakery specialties. Kitchens of Sara Lee, Inc., Chicago, will market frozen coffee, pound and cheese cakes through a national network of local representatives and brokers.

Long supermarket hours have sliced profits to a point where 55.5% of supers would like to close on one or more of the light days (Monday, Tuesday, Wednesday). So says Selling Research, Inc., which bases its findings on a survey of 852 supers in 51 cities.



OVER 6 MILES of Weldwood Karina® Movable Partitions are planned for Ford's efficient new administration building. This full-scale model shows part of the installation designed by architects Skidmore, Owings and Merrill, to be made by Detroit Partition Company.



WELDWOOD "STAY-STRATE"® DOORS with the Life of the Installation guarantee are used with these partitions. Doors match birch, Karina and walnut partitions in regular stock. Both blend harmoniously into any decorative scheme, as in Ford's contemporary setting shown above.

Weldwood Movable Partitions to be used in new Ford Central Staff Office Building

Here's why Ford's new Central Staff Office Building will use the *only* flush partitions that combine the beauty of real wood with low-cost movability.

- 1. THE BEAUTY OF FINE HARDWOOD PANELING** adds warmth and dignity that are important to employee morale, and complements any decorating scheme.
- 2. NEW OFFICES OVERNIGHT.** Weldwood's unique metal key construction locks panels together firmly, yet allows quick rearrangement by regular maintenance crew.
- 3. NO PAINTING—NO REDECORATING!**

Occasional cleaning and waxing is the only maintenance needed. Paneling looks like new indefinitely.

- 4. FIRE-RESISTANT WELDROK®** panel core makes a sound barrier that's *twice as effective* as a 2 x 4 stud partition with metal lath and plaster on both sides.

LIKE TO KNOW MORE? Ask your architect (he'll find all specifications in Sweet's Files) or write for descriptive brochure and name of nearest distributor to United States Plywood Corp., Dept. BW9-24-5, 55 West 44th Street, New York 36, N. Y.



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A product of

UNITED STATES PLYWOOD CORPORATION
World's Largest Plywood Organization

Credit Unions: Hazards of Growth

● Coming trial of officials of Ford Rouge Employees Credit Union spotlights fast-growing loan groups.

● In 10 years, the number has doubled, loans have multiplied 12 times—and the big ones get bigger.

● Critics say weaknesses shown at Rouge extend through system, but groups cite high repayment record.

Next month, two men will go on trial in Detroit. One will be charged with embezzlement from the Ford Rouge Employees Credit Union, which with its 15,000 members is one of the country's largest. The other will be tried on an assortment of charges of conspiracy to defraud the same organization and of violating federal regulations.

The first case is almost routine. A teller allegedly walked off with \$53,000 in cash, confessed after arrest, and a bonding company immediately made the loss good. That in itself was nothing unusual. Surety company officials say there has been a marked increase in embezzlements in financial institutions across the board in the last few years.

But as a result of the embezzlement case, federal examiners gave the organization a thorough overhauling, and temporarily suspended its operations last March, listing 23 specifications of mismanagement or violation of regulations. A federal grand jury returned criminal indictments against the treasurer and four other officials.

• **Debate**—Credit union men, both in and out of Michigan, tend to sniff at the charges. They point out that the Rouge credit union is still solvent and in operation, and that no losses were ever threatened to members' savings. They imply that the whole fracas was politically inspired.

Bankers and some other outside observers, on the other hand, claim that weaknesses exposed at Ford Rouge are characteristic of the whole credit union system. Both may have a point. Credit unions as a group have been growing so fast they've attracted attention—and resentment.

• **What They Do**—A credit union is a private cooperative group, designed to accept small savings of members, make small loans to them for "provident or productive purposes"—and especially to keep low-income workers out of the hands of loan sharks, when emergencies arise. Membership is limited to a "common bond"—which may be purely

social, or religious, or community-wide. In practice, however, probably 85% are formed by employee groups of single plants or offices, or by trade unions.

I. Part-Time Financiers

In recent years, the credit union has proliferated. In 1954 alone, about 1,000 new ones opened. At the end of the year, there were 15,000, more than double the number 10 years earlier. Combined assets were \$2.3-billion, a sixfold increase—and combined loans, at \$1.6-billion, were 12 times as great as a decade earlier. It's the bigger ones (several have assets well over \$10-million) that are growing fastest.

In the search for outlets for funds, the credit unions have branched into fields undreamed of in the original concept—auto loans, appliance loans, mortgages, and even pure and simple commercial enterprise.

By commercial banking standards, though, the credit unions are still a negligible factor. Last year they held only 2% of the country's individual savings accounts, only 4% of the short and medium-term consumer credit. And they cannot accept checking accounts, or make loans beyond their membership.

• **Why They Grow**—Many factors are behind the credit union growth. For one thing, they're convenient—most are located right in a plant or office. For another, interest rates (or "dividends") are higher than for most mutual banks. The average credit union was paying 3% when mutuals were paying 2% and commercial banks 1%. Accounts are of all sizes. A substantial part of Ford Rouge's "shares" represent accounts of \$10,000 and more; but the unions will accept deposits as low as 35¢ at a time.

But the most important factor, probably, has been the willingness to make loans to individuals, and loans for purposes that commercial banks and mutuals would reject—at frequently lower interest rates.

• **Well-Liked**—Most credit unions have been spontaneously generated by employee groups (it only takes seven individuals to form one), but by and large, management has liked them. Companies often furnish free office space, technical advice. They've found that in many cases the credit union has been a morale-booster. But as the unions grow larger, most managements tend to shy away from direct contact—partly to avoid potential financial responsibility, partly to avoid the implication that the company is either making or underwriting a loan.

Unions like them for the same reasons. But except where the union itself starts one, the labor organizations generally stick to a hands-off policy—mainly to avoid the development of a possibly competing political clique.

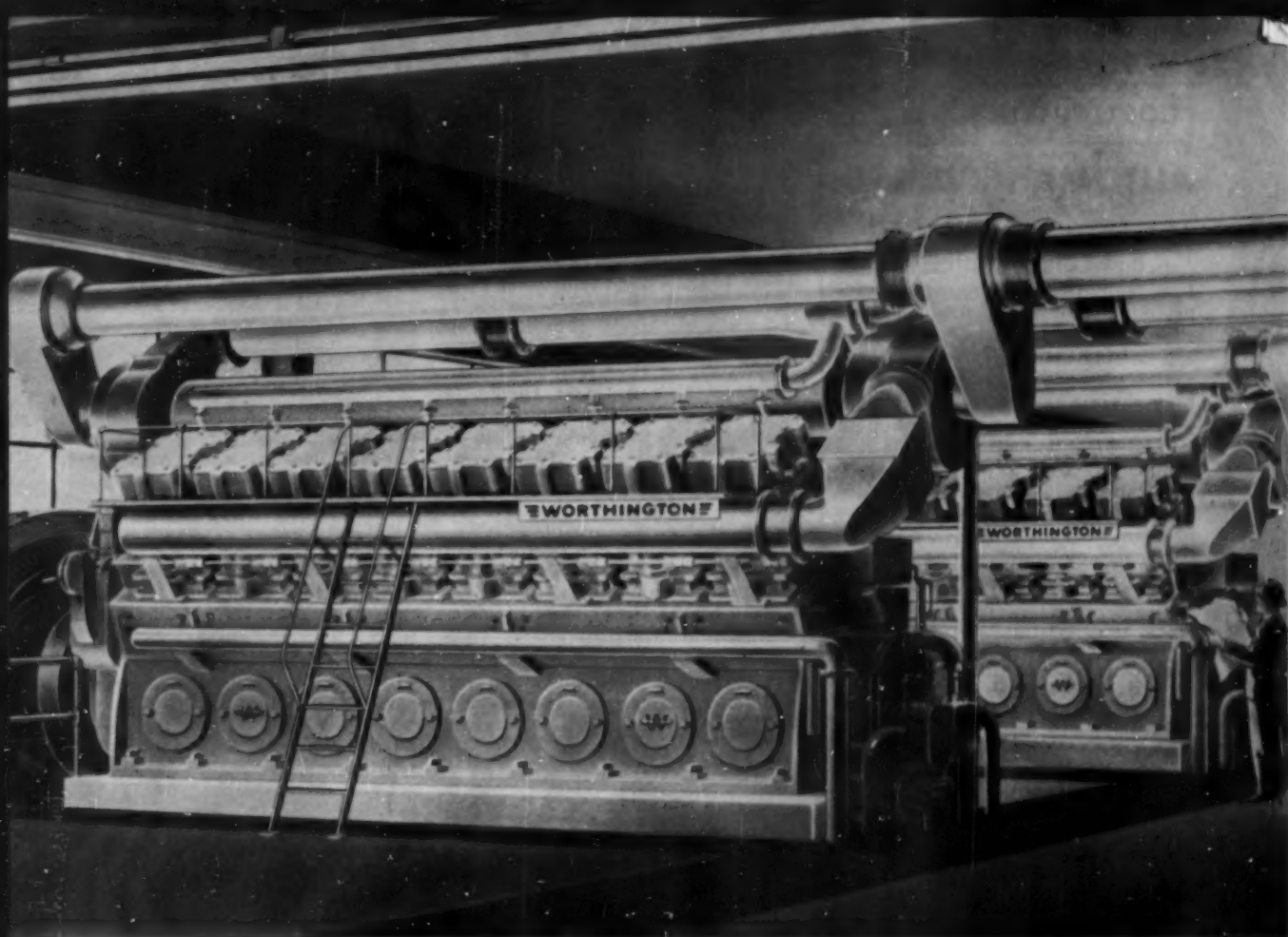
• **Amateurs**—Both the main strength and the big weakness of credit unions lie in the same salient fact. They're run entirely by amateurs.

Rober Vezzosi had been treasurer of the Ford Rouge credit union for 10 years before he was indicted last spring. Last year, he was president of the Michigan Credit Union League. After the charges had been brought, he was reelected to that post with acclamation. "Off the record," says another official of the state league, "if what was going on at Rouge was illegal, then we may all be criminals, since many of us operate the same way."

But there's a matter of semantics involved here. Although all credit unions conform to the same general pattern, there's a wide variety of sizes and scope. All are run by amateurs, all operate rather informally. Control is in the hands of "shareholders," those who have \$5 or more on deposit.

Usually a union has only one paid officer—the treasurer, who acts as general manager—and a few paid clerks. Officers—including the treasurer—and supervisors are elected as much on a basis of personal popularity as qualifications. And officers, especially in the larger organizations, can often give only perfunctory part-time attention.

• **Regulation**—Operations are regulated either through the Bureau of Federal Credit Unions (for those chartered under the Federal Credit Union Act) or by state banking superintendents (if chartered under various, and varying, state laws). All the rules set up put limitations and restrictions on amounts, terms, and types of loans. But generally, the individual group will weigh "character"—or personal familiarity,



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Up to this time, turbocharging has been *added* to heavy-duty engines to step up power. Although this proved successful, the development engineer soon found himself in a strait-jacket. He couldn't take full advantage of improved turbocharging techniques—which would provide *more* horsepower per cubic foot of piston displacement and *higher* overall efficiency, resulting in still better operating economies and lower installed costs.

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COST CUTTING

AUTOMATIC VALVES:
The trend is upward

In the trend towards 100% automation, many plants are remodeling for as much automatic control as possible, rather than completely replacing existing facilities.

One phase of automation that has proved very important—and difficult—is the remote power operation of valves. Most valves present a real problem because powerful, complicated and expensive equipment is required to seat and unseat the bulky mechanism that closes the valve. One valve, though, stands out as ideal for any type of remote power operation . . . the Rockwell-Nordstrom lubricated plug valve. Most plant and process engineers agree that this valve overcomes the disadvantages of ordinary valves. They cost no more—often less—than ordinary valves and they have proved much more economical from a maintenance standpoint.



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Control is faster and easier on the Rockwell-Nordstrom valve because it is opened or closed with only a quarter-turn of the tapered plug. The operating mechanism moves through only 90° . . . two to five times faster than ordinary valves. Pressurized lubricant in a thin film around the plug prevents leakage of even the lightest gases and greatly reduces operating torque. The hydraulic action of the pressurized lubricant keeps the tapered plug "cushioned" for instant operation and eliminates stuck valves.

With electric, hydraulic or pneumatic operators, the Rockwell-Nordstrom valve assures dependable, trouble-free economy in remote power operation, with simpler, less costly operating mechanisms. Rockwell Manufacturing Co., Dept. 1-J, Pittsburgh 8, Pennsylvania.

more heavily than standard banking requirements.

• **Record**—And in most credit unions, the informality works well.

The average credit union has only about 500 members, and the majority are smaller. As a general rule, it's possible for supervisors and directors personally to know something about every member.

Actually, the record of credit unions has been exceptionally good. The loss ratio on unpaid loans, according to the Bureau of Federal Credit Unions (a part of the Health, Education & Welfare Dept.) has been only one-fifth of 1% of total loans. Many credit union men conceded that the regulations are shaved occasionally—most often on the side of over-generosity.

But they maintain that the social and moral pressure of owing money to a fund that represents the savings of co-workers has a far more potent effect on repayments than legal threats. "Time and the law of averages is on our side," says one credit union man, "as long as nothing happens—like an embezzlement—to upset the cart."

II. Tempest on the Rouge

At Ford Rouge, the cart was upset. The particular charges must still be decided by a jury. But on the admission of current officials of that group, conditions existed—and still do—that could have made such things possible. And the general operations at Ford Rouge are not untypical of some other large credit unions.

• **Furor**—Most of the furor at Rouge hinges about some questionable loans: one to build a skating rink; another to a member of the supervisory committee of the credit union; a third to a partner, or former partner, of the treasurer; and still another to the treasurer's mother. Some other charges included padding expense accounts to cover account shortages, and issuing misleading financial statements. Most of the 23 reasons for suspension of the group by the federal bureau revolved about mis-handling of loans.

Richard Alatala, current treasurer and a former director, argues that the loans were not questionable. As proof of their soundness, he says that all except one (the skating rink) either have been, or are being, repaid. But he admits that the quick repayment "might" have been due to the publicity.

• **Operation**—Rouge, like most credit unions, has four officers, only one of them paid—the treasurer at \$8,500 a year. It also has nine-man board of directors (which includes the officers), a five-man credit committee, and a three-man supervisory committee to watch operations and "audit" the books. Except for the full-time treasurer, all

these men work in the Ford plant.

Alatala has had no prior banking experience, although he was a member of the board of directors for several years.

To handle the day-by-day chores of processing some \$3-million each of deposits and loans, he has 17 full-time paid assistants, tellers and clerks.

To become a member at Rouge, one must work in the Ford plant; pay a 25¢ membership fee, buy one \$5 share, and in theory, be approved by the board of directors. The union already has 15,000 members, and with up to 500 membership applications coming before the directors at a once-a-month meeting, approval is fairly automatic.

• **Loans**—Loans are almost as simple. There's an application to fill out, but no interview. A loan clerk calls the local credit bureau on the applicant's rating, if any.

The credit committee meets three times a week, and the five men stagger schedules so three are always supposed to be present. On occasions, meetings have been held with only two members—to pass on as many as 50 loans in a couple of hours. The average loan runs about \$425, but single loans have gone up to \$45,000.

Large loans, theoretically, must be approved by the board of directors also.

To get a loan, a new "member" plunks down his \$5, can immediately apply to borrow \$405. And since one committee, to approve his membership, might not meet for three weeks, and another might consider his loan application the next night, on occasion loans have been granted before a man was officially a member.

• **Casual**—The same casual touch runs through most operations. At one point last year delinquencies, according to Alatala, rose to 28% of outstanding loans. Now they're down to 19%. The U. S. Attorney's office claims that on the last annual statement, delinquencies were listed as \$175,000 less than the actual figures.

Rouge officials say they weren't delinquencies, because "as long as we know it's going to be repaid, even if a man's having a little trouble at the moment, we don't consider it delinquent."

• **Pyramids**—What happened at Rouge was that loans were pyramided. A member makes a loan for 36 months, the federal limit. If he falls behind in payments, by standard practice he is delinquent. But the credit union could cancel the original loan, make out a new one for another 36 months. The new loan, therefore, is not delinquent, and no reserves need be set against it.

• **Temptation**—Even the confessed embezzlement was made possible by some overlooking of the rules. Credit unions

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are not supposed to cash checks. As a practical matter, members get into the habit of cashing their pay checks there, by making a small deposit, taking the balance in cash. To handle the load, it's claimed, the Rouge credit union kept about \$150,000 more in cash on the premises that it was authorized to have.

- "Mistakes"—Alatala, who was a director of the Ford Rouge credit union when these things were happening, concedes mistakes were made, but he argues that "the irregularities were just mistakes in judgment, by untrained personnel, not deliberate crookedness on anybody's part."

III. Ounce of Prevention

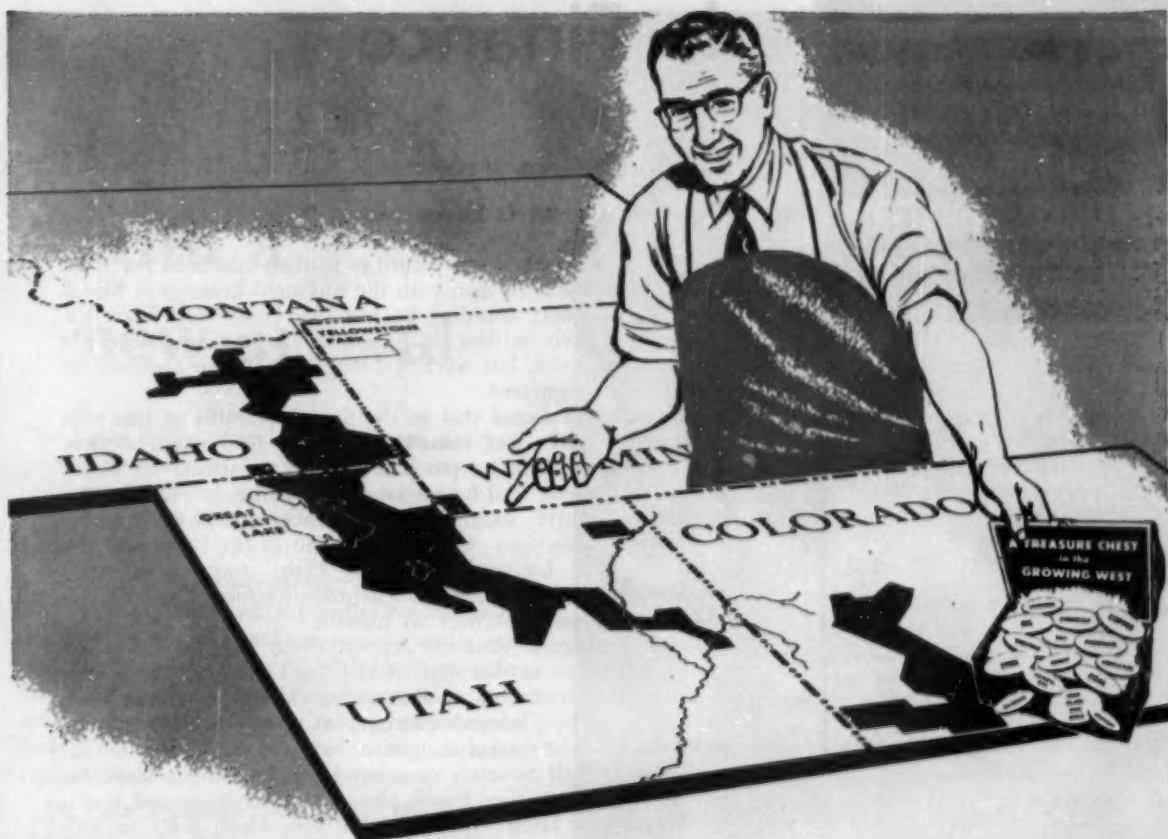
One credit union "expert" (who is also a spokesman for opposition groups) agrees that most credit union officials are sincere and dedicated men—and extremely cautious in the handling of their members' money. "But now credit unions are getting too big," he says, "for dedication and sincerity to be enough. More and more they're reaching the point where the pros will have to move in and take over. And when the pros get loose in such an informal setup, watch out. Most of the amateurs don't know the tricks. The pros know all of them."

So far, there has been remarkably little trouble. Of the 7,000-odd credit unions under federal jurisdiction (an equal or larger number are state-chartered) only five were suspended last year—two for improper management, three because solvency was threatened either through theft or outside factors. But even credit union people concede that some trouble seeds might be around.

- **What's Needed**—Outside banking groups—and even Pres. Eisenhower—have advocated stricter regulation for credit unions, preferably with some sort of "share insurance" similar to Federal Deposit Insurance. Most credit union men, and their associations, are strongly against more regulation or even share insurance, say what's needed is just better use of existing controls.

They argue that to make credit unions conform to commercial banking standards would destroy their entire purpose—and that insurance would make credit officials much more lax because they'd feel "protected."

- **Voluntary**—Some state leagues are trying voluntary plans that would in effect insure their member unions. Thus, if a plant suddenly shuts down, and hundreds or thousands of men are thrown out of work, making immediate loan repayments difficult—the state associations, through previously established funds, would pay off shareholders, try to collect later. **END**



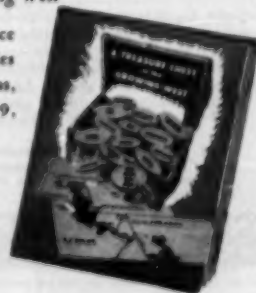
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In Finance

Big Board Finds More Data

Denying Credit Is Excessive

The use of credit in the securities markets has been the focus of lively discussion all year, with the Fulbright hearings in March providing the best sounding board. The New York Stock Exchange has been battling hard against the notion that credit has been excessive; last week it brought out more ammunition to bolster its argument.

The exchange found that in the first six months of this year, commercial banks had loaned \$4.5-billion to brokers, dealers, and individuals either to purchase or carry securities. Its survey found that about \$1.1-billion of that was being used by the securities industry itself, with the remaining \$3.4-billion for customers' transactions. Only \$850-million of the latter, says the Exchange, was for trading—less-than-30-day transactions—while \$1,190-million was for one-to-six month investment, and \$1,315-million for investment over six months.

While the figures generally support those brought out in the Exchange's earlier market study (BW—Aug. 13 '55, p122), the critics still say that investment motives are as changeable as the stock market—yesterday's long-term investment turns into today's quick profit trade, if the market is right.

Whether Wall Streeters considered the Exchange's classifications valid or not, they found plenty of interesting—and new—statistics in the latest study. For instance: About 1.3% or \$60-million of the total borrowings in the first six months of 1955 were by odd-lot dealers and specialists for carrying their inventories on the Big Board and other exchanges. Another \$65-million was used to carry underwriters' inventories, with about 75% of that going for municipal bonds.

Brokers and dealers used \$970-million to maintain positions in securities, with the breakdown going like this: \$460-million for corporate stocks and bonds; \$260-million for municipals; \$250-million for U. S. governments.

Finance Briefs

And try again: Cook County (Ill.) expressway officials, still smarting from last month's rejection in Wall Street, are planning to reoffer \$40-million of serial bonds on Oct. 15. Since the county rejected, in early August, an underwriters' bid that would have meant an interest cost of 2.69%, it has been stumping in Wall Street for a better bond rating. A one-notch drop in ratings plus a shaky municipal bond market (BW—Sept. 10 '55, p62) were blamed for the earlier difficulties, but now officials are confident they will get a better bid next month.

A cold winter is the dream of fuel oil distributors, even more than usual. Last week's 137.8-million bbl. of distillate inventory was the largest ever, and so far refinery runs continue at top speed. Price cuts are in the offing, barring a chilly fall.

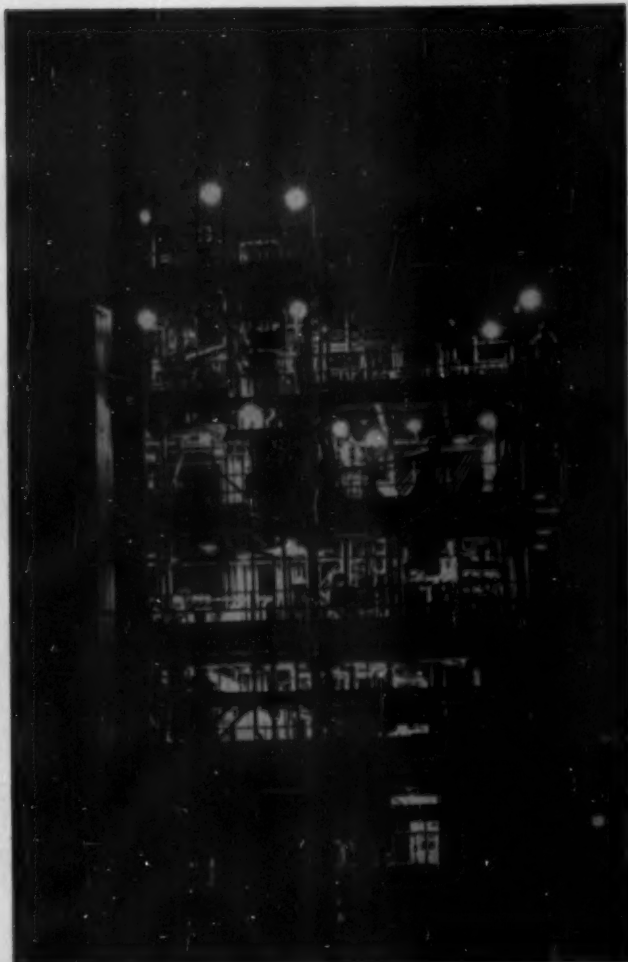
There's just as much picking and choosing in the new issues markets as on the Big Board. Last week, while higher grade issues found sticky going, C.I.T. Financial Corp. had \$100-million worth of bonds sold within a few hours.

Up all night with a new arrival

The lights are burning late at our new plant in Parlin, New Jersey. We're working around the clock to supply the field of photography with a revolutionary product — a new polyester photographic film base, "Cronar"®.

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Du Pont "Photolith" lithographic film, used by the graphic-arts field, will soon be on "Cronar," and before long we'll introduce other films on "Cronar" base. For more information about this superior new base, just mail the coupon below for an interesting free booklet.



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FLUOROSCOPIC EXAMINATION insures golf-ball quality by checking brilliant image of concentric core with G. E. x-ray unit using Du Pont "Patterson" Fluoroscopic Screen.



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209

PRODUCTION



ALUMINUM sheathes the Alcoa building in Pittsburgh.

Some of the best-dressed new skyscrapers are clad in metal (pictures above). The fashion leads to hot competition within the metal wall industry. Aluminum and porcelain-enameled sheet metal are still leading the field, but stainless steel is making a new bid after years of being handicapped by shortages. A Princeton University report will help sell stainless to the architects and builders.

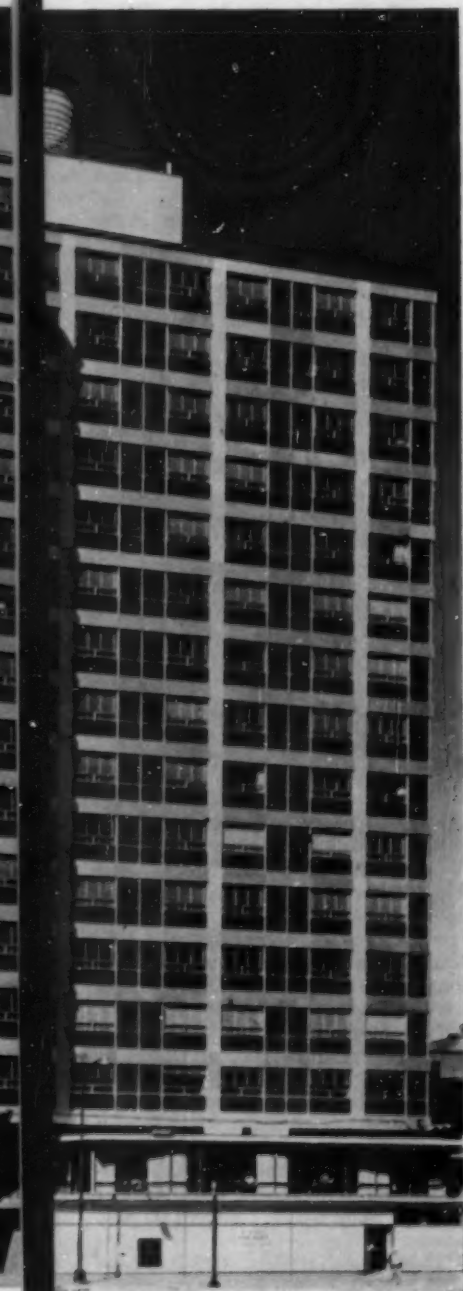


ENAMEL on sheet metal dresses up

Stainless

Year by year, metal makes greater inroads in masonry's long dominance as a material to sheathe skyscrapers. Three forms of metal rank in tonnage as they rank chronologically:

Aluminum, as used in the Aluminum Co. of America headquarters in Pittsburgh (above left).



the Hartford Statler Hotel.



STAINLESS STEEL covers the new Socony Mobil Building.

Steel Joins the Market Battle

Porcelain-enameled metal, as in the Hartford Statler (center).

Stainless steel, as in the Socony Mobil Building in New York (right), largest metal-clad office building in the world.

The revolt against masonry in curtain walls (walls that don't support the

building) dates from the end of World War II. Until recently, however, aluminum and porcelain enamel had the non-masonry field pretty much to themselves. Now stainless is making its move.

• **Advantages**—With metal, walls are thinner and lighter. This allows more

usable interior space. Because the skin of the building weighs less, the skeleton and footings can also be built lighter and cheaper. Moreover, metal skins go on fast; a panel can be clamped in place in a fraction of the time it takes to set an equal area of bricks or stone blocks.

Aluminum panels in the 30-story

a better kind of power for the refrigeration industry

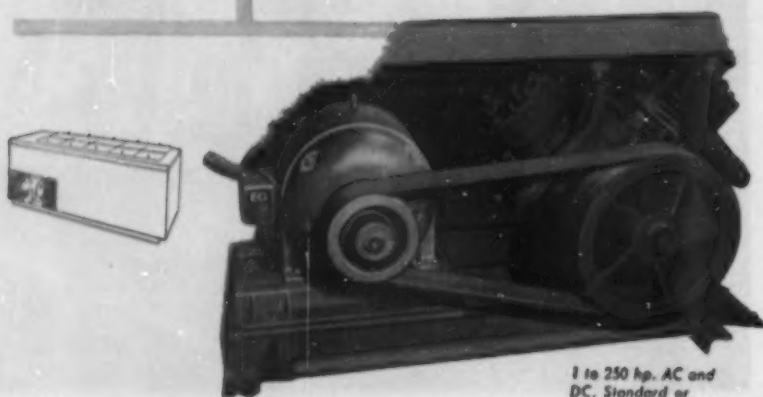
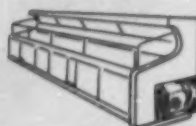


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Alcoa Building in Pittsburgh (BW—Sep. 26 '53, p138) are only about 6 in. thick; masonry walls in a building that tall would be three or four times as thick. The panels weigh about 40 lb. per sq. ft. Stainless steel panels in the Socony Mobil Building in New York weigh about the same, with a thickness of less than 4 in.

Weight is being slashed in many cases, though. The pale blue enamel panels in the Hartford Statler have been shaved to 4½ lb. per sq. ft. In the Republic National Bank Building in Dallas, panels of aluminum backed by glass fiber weigh only a little more than 2 lb. per sq. ft.

• **In Greater Use**—In the competition among non-masonry wall materials, aluminum got off to a fast start. Three years ago, about 50 aluminum-clad buildings were completed or under construction; today, trade sources guess there are now more than 300.

Porcelain enamel—usually laid over carbon steel but sometimes over aluminum—hit the market hard only a couple of years ago. Between 1940 and 1950, its architectural business moved up from \$1-million to \$10-million; by 1953, it had risen to \$25-million; this year it will pass \$40-million. Besides the Hartford Statler, the new Statler in Dallas and the Mile High Center Building in Denver are enamel-clad.

By comparison, stainless steel has gained slowly. Its biggest year in the building field was 1953, when a mere 31,000 tons went into buildings (with no breakdown on figures to show how much was used on exteriors). In that year, the building business used 160,000 tons of aluminum, and the lighter metal has continued to gain.

• **New Study**—This week, the stainless steel industry lifted the curtain on its big challenge to rival metals. A team of four architects at Princeton University has completed a two-year study of all aspects of stainless in curtain walls. With the help of the architects' findings, out this week, the steel industry plans to build up its competitive position.

• **Handicaps**—Stainless steel has been used quite a bit on building exteriors in combination with masonry, but all-steel skins are new. Three 20-story buildings in Pittsburgh's Gateway Center (BW—Mar. 29 '52, p72) were first to be clad wholly in stainless; Socony Mobil Building is the fourth and largest use of the metal (375 tons).

Stainless has never been completely free to compete in the metal-clad building market. Nickel—an important ingredient—has been restricted in some degree; so was chrome during the Korea buildup. Then, too, stainless costs more than other metal cladding.

On the other hand, the stainless steel producers feel their material has ad-

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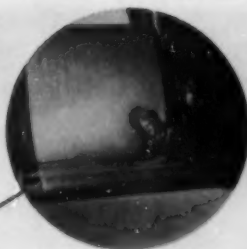
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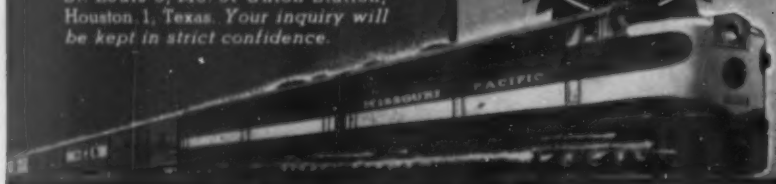
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vantages over other metal skins for skyscrapers. They think the Socony Mobil Building will showcase these advantages, catch the eye of architects (though some esthetes have already gone on record as deploring the fancy design of the panels).

• **Study for Architects**—To sell a material in the building industry, you need to be able to show such monuments as Socony Mobil and Gateway Center. You also have to show architects how to apply the material in buildings they're designing.

Two years ago, the Committee of Stainless Steel Producers of the American Iron & Steel Institute asked the Princeton School of Architecture to study curtain wall materials in general, stainless steel in particular, under an AISI grant.

• **Objective**—The Princeton findings are written up in an objective, often lively style. The report makes no excuses for stainless steel's lag in the building exterior field; in spots, it is complimentary to the big competitor, aluminum.

For example, it compares the appearance of the Alcoa Building and the U. S. Steel Building, which face each other across Mellon Square in Pittsburgh. Alcoa's headquarters is clad in aluminum; U. S. Steel's, completed four years ago, teams up limestone with stainless steel spandrels (the space from the top of one window to the sill of the window above it).

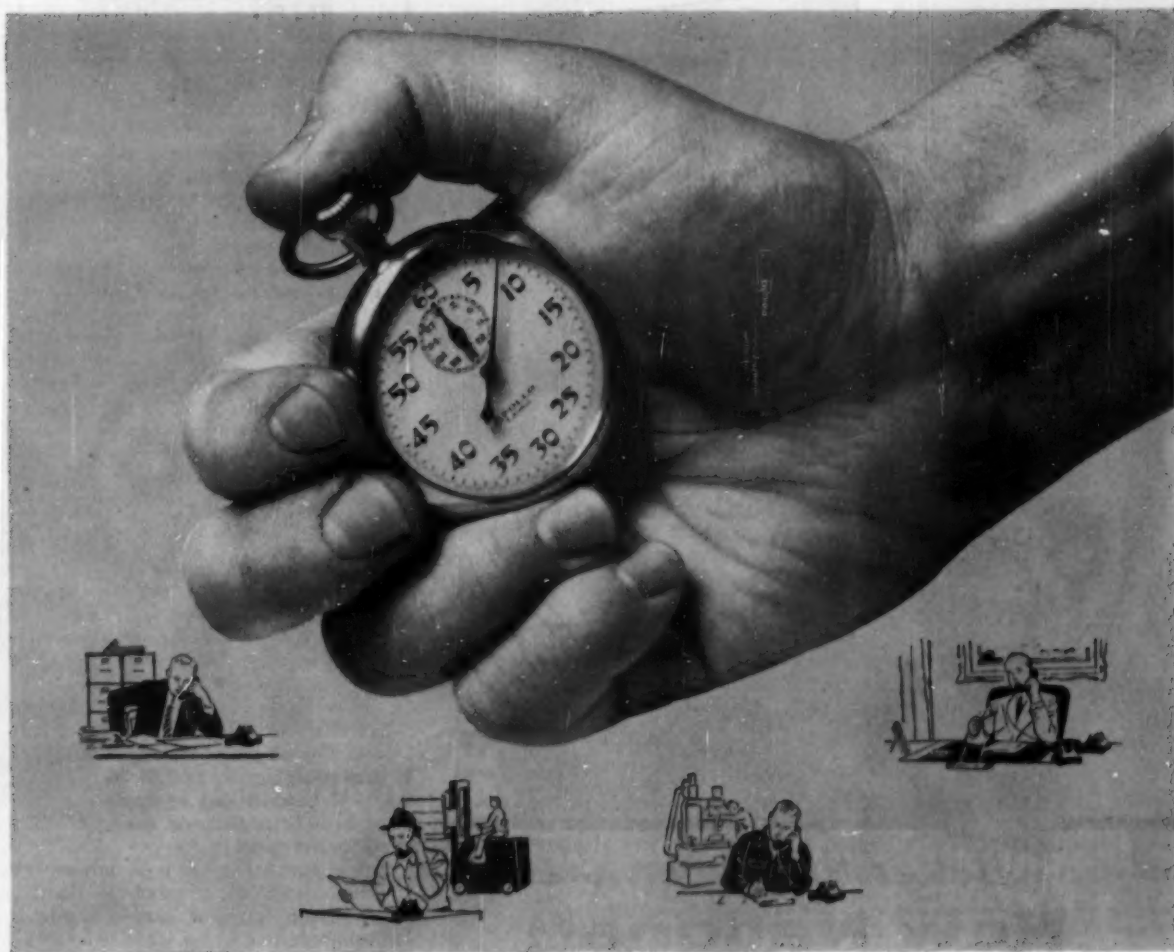
About the Alcoa Building, the report has this to say: "The general impression is entirely fresh, and the design is a successful expression of sheet metal construction."

About the Steel building: "The intent of the [spandrel] pattern, which was successfully accomplished, was to give the panels a sense of solidity and also to break up any large reflective areas. However, the pattern is also remarkably successful in collecting dirt and thereby destroying much of the attractive character of the stainless steel."

These comments are typical of the tone of the report: enthusiastic about stainless steel as a building material, often critical of the way the material has been handled.

• **Cost Problem**—Higher cost has helped to hold stainless back. When the Socony Mobil Building was being planned, owner John Galbreath reportedly suggested that it be clad in stainless, but the architect and builder feared it would be too costly. According to Architectural Forum, "The steel industry wanted the building, and cost was not going to prevent them from getting it. To meet the competition, they were willing to write off any price differential as the cost of promoting steel."

The story is a reminder that the first



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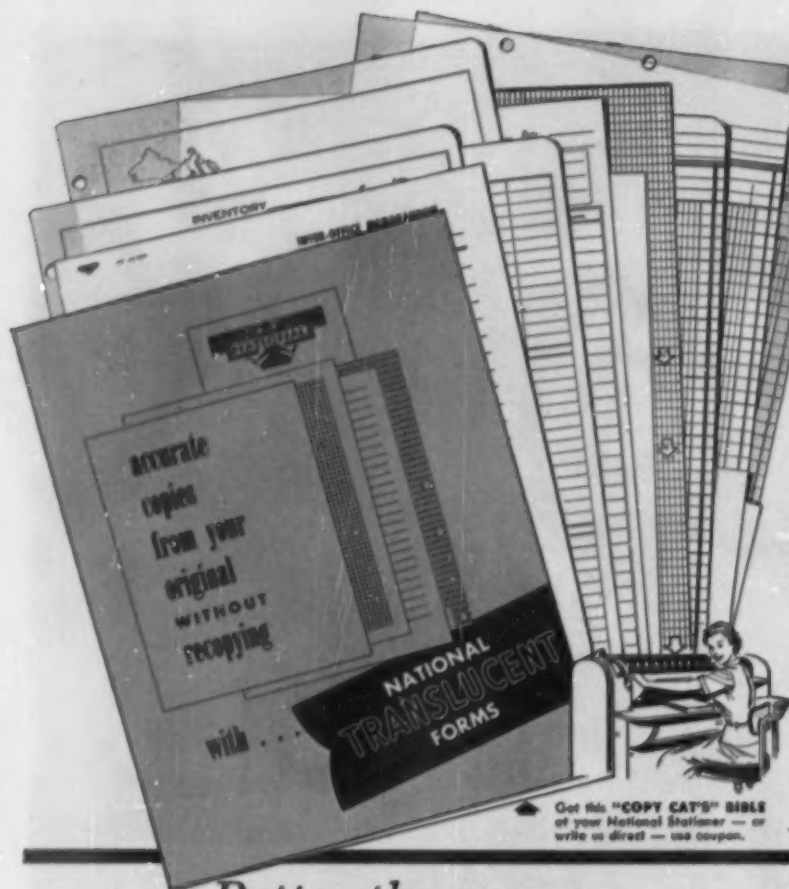
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uses of a material are the most expensive. The Princeton report recommends that stainless steel producers develop some basic curtain wall systems, standardizing the dies, details of joints, and patterns of finish.

As it is now, each new building of importance constitutes a new development problem, with die costs amortizable over a limited volume. Aluminum and porcelain enamel makers have already standardized.

• **Color Added**—Producers of stainless are also working on variety of colors. Aluminum panels come in six colors—gray, gold, blue, yellow, brown, and black—and green will be added to the selection soon. Porcelain enamel, of course, can be had in all the colors of the rainbow. Stainless, however, has had only two colors to offer: natural and black (the latter produced by an oxide process developed by Armco Steel Corp.).

The Princeton architects concede that adding color to stainless may seem like painting the lily, but they say it's necessary for competitive reasons. Du Pont has been working with Princeton on coloring stainless by thin, translucent coatings of enamel.

This doesn't create just another porcelain-enameled steel, the report says: The enameled stainless would still have advantages of that metal:

• Enamel can be applied after a panel is fabricated and need not cover the entire panel.

• Enamel can be used only on the exterior side of a panel, if desired. Aluminum warps if only one side is enameled.

• Only one coat of enamel is needed; two or three coats are needed on carbon steel (Alcoa has just developed a one-coat process for aluminum).

• Small flaws that could cause spalling and corrosion on other metals have no effect on enamel laid on stainless steel.

• **Industry Powwow**—Next week in Washington, under direction of the Building Research Institute, all the big producers of metal curtain walls will line up shoulder to shoulder at a conference.

Their strategy: to develop a broader market before competing among themselves for that market.

The Princeton report fits into the aim of the conference to provide more technical information for architects, contractors, material suppliers, and building owners. And it will help to answer groups that have attacked the idea of the metal curtain wall.

The industry will present a solid front, too, against building codes that set up barriers against the use of metal walls. Here, also, the Princeton report will provide ammunition. **END**



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Properly engineered colors reduce eye fatigue and cut down accidents in Mt. Wolf Plant of the American Wire Fabrics Corp.

ANOTHER impressive example how Pittsburgh COLOR DYNAMICS improves productive efficiency and reduces danger of time-loss accidents by lessening eye fatigue among employees is the Mt. Wolf, Pennsylvania, plant of the American Wire Fabrics Corporation.

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"By the use of focal colors on working parts of our machines in con-

trast to eye-rest colors on stationary parts, operators see their work better. This reduces eye strain considerably. As eye strain is one of the chief causes of physical fatigue, we have found that both the quantity and quality of production are improved. Safety colors on hazard areas reduce danger of accidents.

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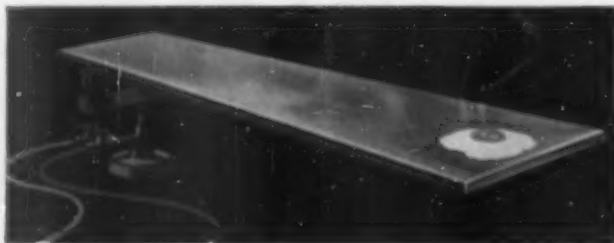
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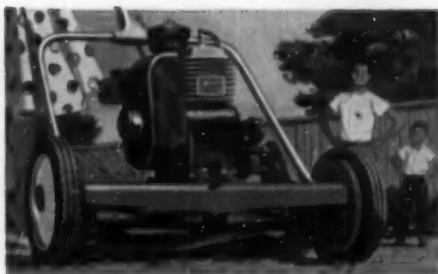
If it must conduct heat



Kaiser Aluminum's ability to conduct heat is dramatically demonstrated above. Even though the egg is four feet away from the flame it cooks quickly and evenly.



This also demonstrates Kaiser Aluminum's ability to conduct heat. Aluminum tube, buried in dry ice, quickly conducts heat away from the ice tray filled with water—which rapidly freezes.



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Heat conductivity of aluminum shelves in frozen food cabinets quickly absorbs warmth of food—thus speeds freezing.



Heat conductivity of aluminum makes it ideal for modern radiators. Aluminum fins quickly get hot, transfer heat into the room.



Heat conductivity of Kaiser Aluminum foil—beneath the surface of this table pad—spreads heat, prevents scorching.



Heat conductivity of aluminum "sole" on modern electric iron distributes heat rapidly and evenly for better ironing.



Heat conductivity of Kaiser Aluminum enables bottle warmers, pots, pans to heat up faster, from bottom to top.

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In Production

• • •

Jack Frye Bids for the Market

Now Filled by the Old DC-3

Whenever airline operators get together, one topic invariably comes up: When are we going to get a replacement for the DC-3?

The workhorse is aging, and costs of maintenance and replacement parts are mounting. But the DC-3 still serves a low-budget market that faster planes can't touch. About 1,600 DC-3s are still in scheduled service (BW-Jul.16'55,p82), including about 150 on U.S. airlines but not including 900 or so converted wartime transports.

Just about every aircraft builder in the world has looked into the problem. A couple, such as the Handley-Page Herald and the Fokker Friendship, are live prospects. Last week, a new entry in the sweepstakes was announced by Jack Frye, president of Trans World Airlines from 1934 to 1947 and president and board chairman of General Aniline & Film Corp. from 1947 until last March.

Frye has set up the Frye Corp. in Fort Worth. Its F-1 transport is still in the design stage but may fly next year. The company aims at production here, and perhaps also abroad, by 1957.

The F-1 will be a four-engine, high-wing monoplane with nonretractable tricycle landing gear. It is designed to get in and out of small fields, to fly at 150 to 170 mph. on short hauls, under 250 miles.

Frye talks of a selling price around \$350,000, compared with an average of about \$600,000 for DC-4s of 1945 vintage or about \$90,000 plus overhaul costs for used DC-3s. He is confident that operating and maintenance costs will be low. Feeder airlines are reported to be interested.

The F-1 started out as a plane for underdeveloped areas where cost is more important than speed. Kurt H. Weil, the engineer behind the famous Junkers JU-52, is Frye's ramrod in the design and engineering department. He says the new plane will be as cheap as the camel per ton-mile—and a hundred times as fast.

• • •

Tiny Clamps Speed Forms

For Pouring Concrete Buildings

One problem that has plagued builders for years has been the time-consuming chore of installing and removing the forms that are necessary when you put down a concrete floor. A professional engineer from New York, Edward S. Klausner, has worked out a quick technique that has saved about \$90,000 in the construction costs of a 12-story apartment.

Klausner's secret is a two-ounce cast iron clip. On the apartment, he hooked the clips over the top flanges

of the Jones & Laughlin Junior Beams. Then he used the clips to support the big plywood forms, into which the concrete was poured.

When the concrete had hardened, workmen went along underneath the forms, knocked away the exposed sections of each of the clips. The plywood forms dropped away and were used again, some as many as 20 times. Klausner figures that he trimmed about \$1 per sq. ft. from the cost of putting in the concrete floors.

• • •

Lockheed Gathers Force for

Rush Job on Electra

Lockheed Aircraft Corp. said last week that it was setting up the largest commercial subcontracting program in its history to produce the new Electra, its turboprop airliner.

The company wants to speed production of the new plane. Its own engineering and production staffs are loaded pretty heavily with other work. So it has contracted with four outside companies to build complete sections of the Electra:

- Menasco Mfg. Co., Burbank, Calif., will produce all landing gear.
- Northrop Aircraft, Inc., Hawthorne, Calif., will build the tail.
- Rohr Aircraft Corp., Chula Vista, Calif., will enclose the engine. (Lockheed has not yet decided which engine to buy.)
- Temco Aircraft Corp., Dallas, will build the wing flaps.

Lockheed will provide basic engineering design and specifications, but the subcontractors will be responsible for everything else: detail engineering, planning, tooling, manufacturing.

• • •

Production Briefs

The world's largest ethylene plant may soon get larger still. S. A. Swensrud, board chairman of Gulf Oil Corp., said last week that the company is considering further expansion of its newest refinery, at Port Arthur, Tex. The new unit now produces 220-million lb. of ethylene per year. When it went into operation, it boosted the nation's ethylene production by about 10%.

Reynolds Metals Co. said last week that it can produce a film of aluminum oxide that's only 2/10,000ths of an inch thick. Twenty-two layers would equal the thickness of a sheet of writing paper. The new film is expected to replace conventional insulating materials in many applications.

Expanding vertically: The Kroehler Mfg. Co., world's largest furniture manufacturer, has opened its own cotton blending plant in Memphis, Tenn. Kroehler says that it is the first such plant to be owned and operated by a furniture manufacturer.

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The company calls it the PG wheel—for polishing and grinding. It is made up of hundreds of pieces of cloth-coated abrasives that have been formed into a wheel. It differs from any other product currently available, says Minnesota Mining, in that it removes stock as part of its polishing action. The advantage: This, plus the wheel's ability to conform to a surface, enable it to remove shallow marks on the face of the metal in the same process in which it generates a buff-type finish.

In one test run, the company says,

BUSINESS WEEK • Sept. 24, 1955



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You can't tell a book by its cover

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Because *all* fluorescents look alike, and they all come from good families. What you don't know—and even an electrical expert can't tell—is which are the ones that will conk out early—and which are the bright treasures that will shine on for years.

With Sylvania fluorescents, you're *sure* of what you're getting. Because whether you order ten lamps or ten thousand—

We'll buy back, at the price you paid, any Sylvania® fluorescent lamps that do not, in your opinion, outperform any other fluorescent lamps you're now using, on the basis of uniformity of performance and appearance, maintained brightness and life.

Note, please, that Sylvania lets *you* be the judge. Why not phone your Sylvania supplier now? When you're ordering, ask for the special "money-back" certificate. You guessed it—it's a good deal for us too. We never

stop working on improvements to keep Sylvania fluorescents ahead of competition. And we *prove* the Sylvania fluorescent lamps against other brands in a constant, year-in, year-out light test—burning them night and day! We're taking no chances—and neither are *you*, when you buy from Sylvania.

SYLVANIA ELECTRIC PRODUCTS INC.
SALEM, MASS.

In Canada: Sylvania Electric (Canada) Ltd.
University Tower Building, Montreal

SYLVANIA

FLUORESCENT LAMPS



**Your money will be refunded
if, in your opinion, they don't outperform
the lamps you're now using, as stated above.**

Announcing NR555 NEW CHEMICAL DISCOVERY!



produces
**MULTIPLE
PHOTOCOPIES**
from
a single negative!

Now—Remington Rand introduces an amazing new chemical, NR555 for producing four or more sharp Transcopy photoprints from one negative. This important new discovery offers sensational time and dollar savings wherever there is a need for multiple photocopies of the same original. NR555 added to standard Transcopy developing solutions produces highest quality multiple OR single copy prints.

Laboratory tested and fully pre-tested by actual users in the field, the Transcopy multiple-copy formula is an exclusive development of Remington Rand. Multiple-copy print life and solution tray life meet the same high standards established for all Transcopy developing chemicals. No special operating conditions are required. Multiple-copy negative papers available in pre-cut sheet sizes.

SEE FOR YOURSELF... the outstanding advantages of NR555 multiple-copy processing. Contact your nearby Remington Rand office or mail the coupon today for a FREE, eye-opening demonstration.

Remington Rand

DIVISION OF SPERRY RAND CORPORATION

Room 1907, 315 Fourth Avenue, New York 10, N. Y.

I want a FREE demonstration of the new NR555 Transcopy multiple-copy process at no obligation.

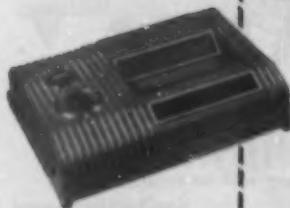
Name & Title _____

Firm _____

Address _____

City _____ Zone _____ State _____

IMPORTANT: Name of Photocopy unit now being used (if any) _____



the wheel reduced polishing cost by 20%.

The wheel is mounted on a hub assembly that can be adapted to fit any spindle.

• Source: Minnesota Mining & Mfg. Co., 900 Fauquier St., St. Paul 6, Minn.



New Transistor Radio

Bulova Watch Co. announced this small, all-transistor radio last week. It is about the size of a large wallet, weighs 12 oz. That puts it in a class with the Regency, introduced last year (BW—Oct. 23 '54, p114).

The model shown in the picture is wrapped in leather, sells for \$60. Plastic models cost \$50.

• Source: Bulova Watch Co., Bulova Park, Flushing 70, N. Y.



Look—No Hands

This typewriter, a standard office electric machine, can be operated with coded electrical impulses. Fischer & Porter Co., its developer, demonstrated it for the first time last week in Los Angeles.

It is mounted on a relay-operated control base that has bars projecting



ALL-MAGNESIUM F-80C jet fighter promises huge savings to taxpayers.

Magnesium plane breaks through cost barrier!

Also faster, stronger, and simpler to produce.

You're looking at an experimental model of the USAF's famous F-80C jet fighter, built by Barium's East Coast Aeronautics, Inc., Pelham Manor, N. Y.

It doesn't look any different from other F-80C's—but the entire airframe is *magnesium*. Using this light but strong metal as structural material eliminated over 60% of the parts and fastenings originally required by the aluminum design.

Using fewer parts and fasteners not only saves material costs, but also reduces the cost of man hours for engineering, parts fabrication and assembly, and the

design and manufacture of tools. And the magnesium plane is faster, stronger, and simpler to produce.

This impressive technical accomplishment by East Coast Aeronautics highlights again the hard-thinking, hard-working management and production team that has built Barium from a single company to 16 in only 10 years. And this alert organization produces a tremendously varied list of products—from massive steel bridge girders to plastic seats. You're invited to find out more about Barium's soundly diversified family of companies. Write for the Barium story. Barium Steel Corporation, 25 Broad Street, New York 4, New York.



Steel Producers

Chester Blast Furnace, Inc. (pig iron) • Central Iron and Steel Company • Phoenix Iron & Steel Co.

Steel Fabricators & Processors

Phoenix Bridge Company • Industrial Forge & Steel, Inc. • Globe Forge, Inc. • The Geometric Stamping Company.

Manufacturers of End Products

Clyde Iron Works, Inc. • Erie Bolt & Nut Company • Bayonne Bolt Corporation • The Cuyahoga Spring Company • Jacobs Aircraft Engine Company • Kermath Manufacturing Company • Kermath (Canada) Limited • Wiley Manufacturing Company

Lightweight Metal and Plastics

East Coast Aeronautics, Inc.

Here's what a cautious company learned about **NORTH CAROLINA**



"The test operations we started two years ago in our pilot plant were so successful and the work of the people we employ so satisfactory we decided to purchase the building we were renting and enlarge our operation here."

Statement by the president
—company name on request

Experiences like the one above explain why so many companies select not just one site but second and multiple locations in North Carolina, the South's leading industrial State.

These are diversified industries — ranging from Aircraft to Zippers, large companies and small, with many different operating problems and requirements. In every case, though, efficient production and cooperative labor are outstanding reasons for satisfaction in North Carolina.

Investigate the opportunities for your company in this State, for early action or long range planning. Statewide information is easily obtained by just a letter or call to Ben E. Douglas, Director, Department of Conservation and Development, Raleigh 4, N. C.

Friendly North Carolina
Where Industry Prospers

A ready-to-mail brochure with data about power, water, taxes, labor, etc., is yours for the asking.

up into the typewriter. When actuated, each bar trips its corresponding typewriter key. Typed log sheets, up to 26 in. wide, can be produced automatically at the rate of 10 characters a second.

Price of the unit: about \$1,200. For another \$600, you can get an attachment to produce punched paper tape that can be fed directly into computers or high-speed data processing equipment.

• Source: Fischer & Porter Co., Hatboro 35, Pa.



For Fast Gulping

This is a coffee cooler, meant for the scurrying train-catcher who never seems to have enough time at the breakfast table to wait for his coffee to cool by itself.

The cylinder is made of aluminum, a good heat absorber. The handle is made of wood. If you work on an extra-tight schedule you should keep the cooler in the refrigerator overnight. Price, postpaid: \$2.50.

• Source: CarnesCraft, Box 185, Fairfield, Conn.

NEW PRODUCTS BRIEFS

The world's first electronically controlled bank vault entrance was introduced this week in Chicago. The Herring-Hall-Marvin Safe Co. of Hamilton, Ohio, says that a pushbutton control withdraws the locking bolts, releases the pressure system, swings open the door, and lowers the foot bridge. To an intruder, of course, it's not that easy; first, he would have to work the combination.

A new insulation material said to be superior to porcelain was announced by General Electric this week. Called Hy-Bute-60, it will be used in instrument transformers that work in the high-voltage ranges from 15,000 volts upward. GE says its one-piece construction virtually eliminates maintenance.



A little space goes a long, long way...

Time was when a space *this* narrow didn't "go" anywhere. Not so now! Bulldog engineers set out to solve the problem of "dead" space—to put it to work. They developed this Narrow Panel Electric-Center® which provides multiple circuit breaker protection in a space $6\frac{3}{4}$ " in width—scarcely wider than a pencil length!

Result? The convenience and safety of famous Bulldog Pushmatic® protection now can be yours even where space is sharply restricted. The attractive Narrow Panel fits easily in a standard "8" H-beam, surface mounts on any nonstructural wall—in corners, near equipment—any place where

space is at a premium. And wireway extensions and pullboxes are also available to conceal wires, eliminate naked conduit, simplify installation.

Ask your electrician or Bulldog field engineer about Narrow Panels and the many other electrical products that bear the Bulldog trademark. From circuit breakers to complete distribution systems, you'll find Bulldog offers higher quality, greater efficiency and more value. Write Bulldog Electric Products Company, Detroit 32, Mich. *Export Division:* 13 East 40th St., New York 16, N. Y. *In Canada:* Bulldog Electric Products Co. (Canada), Ltd., 80 Clayson Road, Toronto 15, Ontario.

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IF IT'S NEW... IF IT'S DIFFERENT... IF IT'S BETTER... IT'S

BULLDOG

ELECTRIC PRODUCTS COMPANY

A Division of I-T-E Circuit Breaker Company



How to get inside the Billion-Dollar Soft Drink Market



Are you a manufacturer who has not yet found the great sales opportunities to be had in the Soft Drink Industry? Here's the inside story:

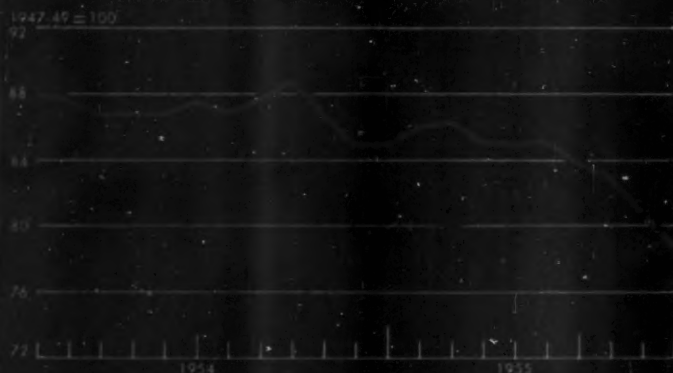
1. Production and sales of the 5400 bottling plants in the U. S. annually total about a billion dollars with employment of almost 100,000 people. Those plants use and buy millions of dollars worth of everything imaginable every year.
2. Bottlers welcome anything that will help them make and distribute a quality drink at lower cost.
3. Practically every bottling plant will be represented in Miami, Florida, November 14 to 17, at the annual Exposition-Convention in the huge Dinner Key Auditorium.
4. Are your products adaptable to this market of high potentials? If so, you will want to exhibit them at the 1955 industry exposition.

For complete information on available booth space or complimentary tickets of admission to study the exposition's value to your business, write to the industry's national association:

**AMERICAN BOTTLERS OF
CARBONATED BEVERAGES**
1128 Sixteenth Street, N. W.,
Washington 6, D. C.

CHARTS OF THE WEEK

Textiles and Fibers Prices



Data: Dept. of Labor. BUSINESS WEEK FILE

On the Skids

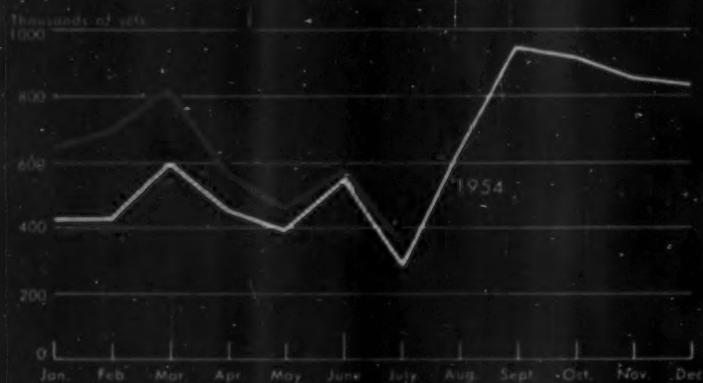
Prices of textiles and fibers, as measured by the Labor Department's daily index, have tumbled in recent weeks to their lowest levels since November, 1946. Pushing the index down are lower prices for wool tops, raw cotton, and burlap.

Prices for wool tops this year have been much lower than in the previous

two years. Even though consumption is up slightly from a year ago, the change in the government wool program is having an unsettling effect on the market (BW-Sep.17'55,p192).

Cotton's latest problem is a large enough crop (in spite of the limitations on acreage) so that little dent is likely to be made in the surplus for another year.

Television Output



Data: Radio-Television Manufacturers Assn.

Setting a Fast Pace

Output of television sets this year is running well ahead of last year's levels. The first seven months of 1955 show a 32% gain over the year-ago period, — and it looks as if total 1955 production will also shoot ahead of 1953. Up to

now, 1953 was the second best year ever.

Peak year was 1950, with an average monthly output of 622,000 sets. In 1953, the average was 601,000. So far, 1955 shows an average of 596,000 per month, compared to the output figure



This is the **PAYOFF...**
when you're carrying **PAYLOADS**

First cost doesn't mean much when you're talking about truck trailers or railroad coaches made of AL Stainless. In such uses, this time-tested stainless steel begins to pay you back right away. It's so strong that there's far less dead weight, and correspondingly more payload. It saves on maintenance—it saves on fuel... and *no other metal* can match stainless steel for ability to take a beating, laugh off corrosion and last almost infinitely in service.

In fact, wherever you use it, stainless costs you less in the long run and eventually pays you a profit. • There's many an advantage waiting for you in AL Stainless Steel—perhaps in your product, perhaps in equipment for your plant or home. Let us help you secure them. *Allegheny Ludlum Steel Corporation, Oliver Building, Pittsburgh 22, Pennsylvania.*

Make it **BETTER**-and **LONGER LASTING**-with

AL Stainless Steel



WAD 5388 C Warehouse stocks carried by all Ryerson Steel plants



... wherever he goes

Capture the most personal of all advertising space — your customer's pocket.

Whatever you select to fill this space becomes a part of him. Wherever he goes, you're there with a friendly reminder of you. Your advertising is first in his pocket in the morning, last out at night, round the clock, building preference for you.

Shaw-Barton has created exclusive advertising specialties in leather and plastic to help you win this space. Complete details in our new Pocket Plan portfolio. Ask your Shaw-Barton representative for a copy . . . or write Dept. B-24.

SHAW-BARTON

Calendar and Specialty Advertising
GENERAL OFFICES AND PLANT, COSHOCTON, OHIO
SALES OFFICES IN PRINCIPAL CITIES



Mercury Clutches help products powered by electric motors or gasoline engines, start easier and run better. In homes, factories, or on the farm, Mercury Clutches give these products the advantages of automatic transmission, help smaller motors do bigger jobs. Tell us about your product. We'll be happy to show you how a Mercury can step up its efficiency, add sales appeal. Write today for complete details!



MERCURY CLUTCH DIVISION
Automatic Steel Products, Inc.
World's largest manufacturer of automotive steel pulleys
1224 Camden Avenue, S.W., Canton 6, Ohio

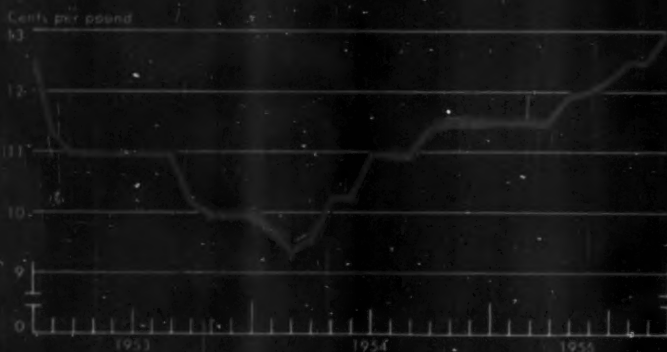
of 593,000 a month in the first seven months of 1953.

This year's production may not be

able to beat the 1950 record, but it should come within range of it — and at any rate top the 1953 figure.

Zinc Prices

(Prime Western, East St. Louis)



Data: F&M Metal and Mineral Markets, BUSINESS WEEK, E.P.

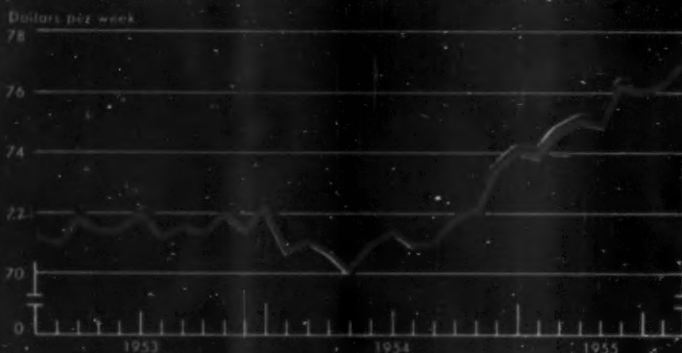
Back Up the Hill

Recent price boosts resulting from strong demand have brought zinc to 13¢ per lb. — the highest level since January, 1953. Since the early part of this year demand has been especially brisk for the special high-grade zinc used in the automotive industry. Demand for the galvanizing grade is also reported

heavy. Government stockpiling, which began around mid-1954, has also helped bring the price up from the low point reached last year.

Stocks on hand at the end of August — 46,087 tons — were at a three-year low. At the end of August, 1954, stocks on hand were 193,253 tons.

Factory Worker's Earnings

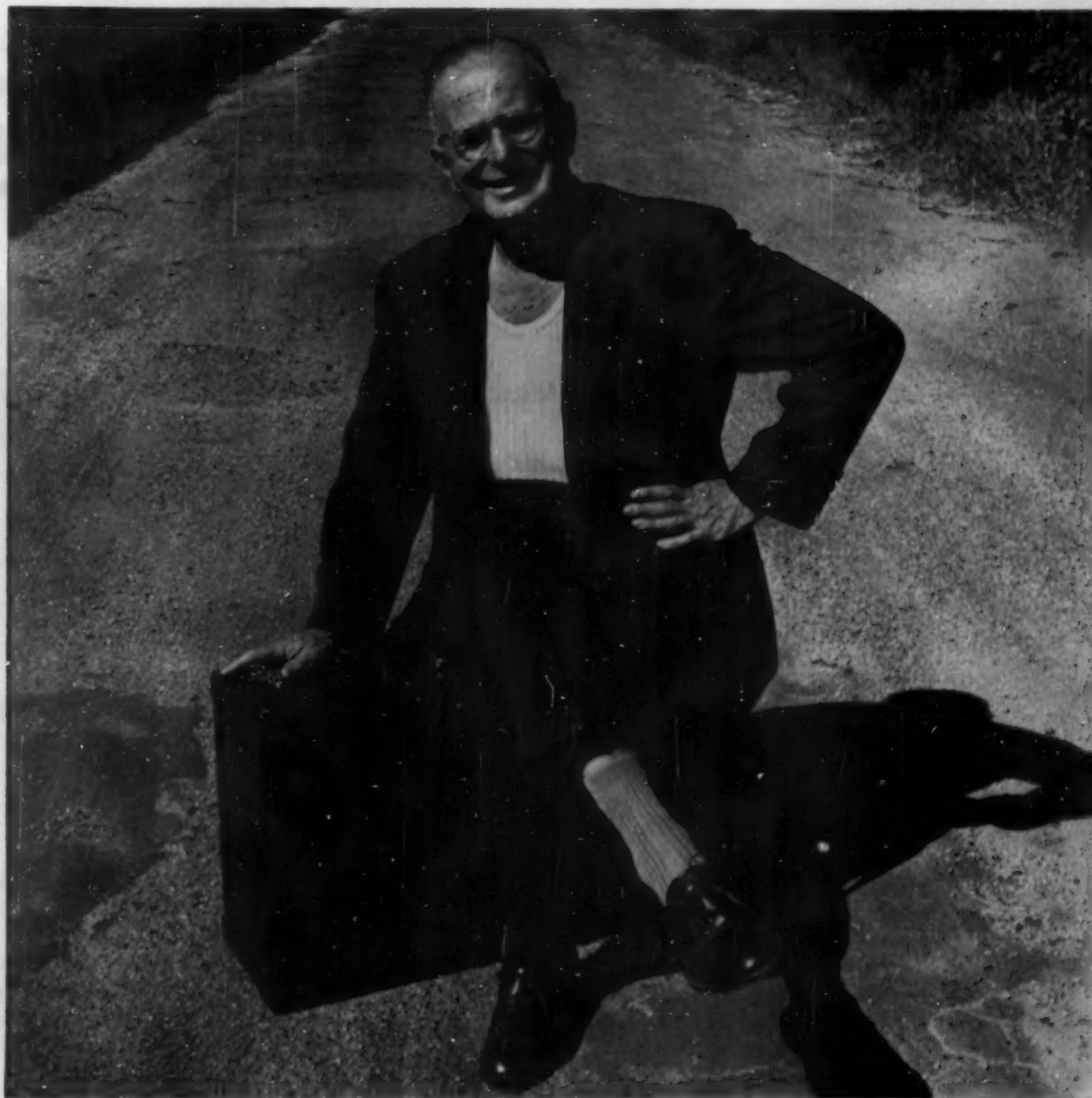


Data: Dept. of Labor

Fattest Average Yet

The average American factory worker took home a fatter pay envelope last month than ever before. Average weekly earnings of all production workers in manufacturing establishments amounted

to \$77.11 in August according to Dept. of Labor figures. This represents a gain of 1.0% over July and beats the level of average weekly earnings for August, 1954, by 8.5%.



Sylvan Geismar, Executive Vice-President of the Manhattan Shirt Company, tells you

"How to lose your shirt on the road!"

"On October 4th, our salesmen take to the road in the annual race for Spring orders. And it's a tough race. If every sample isn't up-to-the-minute in style, we can lose our shirt!

"But we keep our Manhattan and Lady Manhattan salesmen out in front — with Air Express!

"As trends unfold, we deliver the newest shirt-styles to

our men in a few hours. When hot items sell out, we fill buyers' re-orders just as fast! Air Express is indispensable in maintaining our leadership with our retail accounts.

"Yet we save money on most of our Air Express shipments! A 15-lb. shipment from New York to Milwaukee, Wisc., for instance, costs \$5.15. That's the lowest-priced complete service by \$1.85!"



Air Express



GETS THERE FIRST via U.S. Scheduled Airlines

CALL AIR EXPRESS . . . division of RAILWAY EXPRESS AGENCY

**BUSINESS WEEK Reports
on the New Science of:**

Business



Forecasting

- ▶ Every businessman needs a witch. Like it or not, he can't act without making assumptions about what the future will be like.
- ▶ Nowadays, more and more businessmen are relying on the kind of witch who's at home with the statistics in the Survey of Current Business.
- ▶ In the hands of these economists, forecasting is becoming less of an art, more of a science.
- ▶ This week, BUSINESS WEEK reports on the different systems the forecasters are using, something of their possibilities and limitations—a guide to the man who buys and uses forecasting.

At the first United Nations Conference in San Francisco in 1945, the late Edward R. Stettinius, Jr., once chairman of U.S. Steel, and at the time Secretary of State, was posing for a picture. The photographer was Joe Rosenthal, who not long before had shot the classic picture of the flag-raising on Mt. Suribachi.

"How do you want me, Joe?" asked Stettinius.

"Look as if you're peering into the future," said Rosenthal.

"How do I do that?" asked Stettinius, and looked stricken.

"Okay," said Rosenthal, "so just peer."

Like Stettinius, many a businessman and government official has experienced a hopeless, hapless feeling when confronted with the necessity of gazing into mists of the future—but has, nevertheless, composed his features into the proper expression of executive omniscience and gone on making decisions, whether he could see anything ahead or not.

For every policymaker knows that, like it or not, he lives in the future. His every decision must be based on some forecast. And action based on a wrong forecast can be fatal.

That's why the common and most fundamental question every business-

man asks is, "What's the business outlook?" He seeks the answer from his business cronies, his banker, his broker; from newspapers, bank letters, tipsheets, magazines; from the U.S. government; and from a corps of economists.

• **Desperate Chance**—Since these seers frequently seem to speak in as many tongues as did the hodgecarriers at Babel, a harried businessman is often tempted to give up and flip a coin to get a forecast on which he can base decisions.

Coin-tossing as a forecasting technique might once have made sense. But now it makes less sense all the time, as economic forecasting moves from charlatanry to science.

Perfect economic forecasting will undoubtedly always be beyond the ability of mortal men, since economic events are part of the chance-ridden skein of history. But techniques of forecasting, capable of greatly reducing uncertainty about the future, exist now and show promise of getting considerably better.

U.S. business these days is increasingly basing its major decisions on careful and detailed economic forecasts. Says Cecil Burrell, who directs the 80-man economic staff of Standard Oil Co. of New Jersey, "I don't see how you can run any business without them."

This is the approach that's changing the job of the entrepreneur. Classically,

*You can spot productive hands
by the company they keep*

Speed bundling jobs with **Behr-cat**[®] strapping tape

With modern Behr-cat Strapping Tape on hand, your packers will turn out better work in less time. This filament-reinforced, pressure-sensitive tape sticks at a touch without wetting, holds firmly during handling and shipping, and comes off with an ease that your customers appreciate.

Write for this informative booklet "Approved Packaging Specifications for Pressure-Sensitive Strapping Tape". Address Behr-Manning, Troy, N. Y., Dept. BW-9.

In Canada: Behr-Manning (Canada) Ltd., Bradford.
For Export: Norton Behr-Manning Overseas Inc., New Rochelle, N. Y., U. S. A.

T-4



BEHR-MANNING

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he was a risk-taker. But now modern management, backed by professional economists, is coming to see that risk-reduction is a key part of its job. Because of this change, you can define management's function today as one of blending forecasts and programs. Every sound economic forecast implies a sound program.

• **Two Fields**—To make the blend, then, the businessman must have the forecast. And, to find the forecast he can get into the realms of either art or science.

For most of recorded time, the world got along without much science. So it's certainly no insult to any human activity to call it an art and not a science.

The nature of an art, however, is such that the quality of its product depends mainly on the talent of the artist. What he does cannot really be explained or taught. There have doubtless been some magnificent business forecasters in history, but they were artists, and their talent—or their luck—cannot be communicated to others.

Today, economic forecasting is part-science, part-art. This report, however, will attempt to explain only the scientific aspects of economic forecasting.

Choosing the Pitch

There are three basic strategies for economic forecasting. You can call them: (1) loaded deck, (2) oaks-from-acorns, and (3) test-tube.

The loaded-deck strategy may look spurious, but it's extremely important in business forecasting. To work with it you must know what has happened or is happening before anyone else knows, or else you must be able to catch the future just as it arrives at the present. If you know how a deck of cards is stacked, then you know how they'll be dealt—here, the present is identical with the future. The strategy won't work without inside information and fast accurate reporting. But when these are available the results can be impressive. For instance, advance news of the outcome of the Battle of Waterloo, brought through their own carrier pigeons, gave the Rothschilds their chance to make a fortune on the London Stock Exchange in 1815.

Oaks-from-acorns forecasting is based on the concept that the future is not identical with the present, but is an outgrowth of it. So, if you know how the present is germinating or growing, you can figure out what the future probably will be. Closely related to this idea is the notion that change through time is rhythmic or cyclic—and that, like the life and death cycles of plants and animals, business activity also has its expansions and contrac-

The only man in town, you wouldn't dare do business WITHOUT!



He is your
**PROTECTION
AGENT**

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Risks exist in every business, hazards in every home.

You cannot safely conduct business . . . or even run a household . . . without *protection*.

Today property of any sort should be *protected* . . . and the man qualified to do it is National's Protection Agent. He represents the National of Hartford Group of insurance companies. Maybe you think of the police department to protect you against theft or the fire department against fire. But should these fail, National's man *still protects you!*

National's Protection Agent is an expert, licensed by the state. He surveys your property, appraises your

risks, recommends what your coverage should be against each one.

Part of his job is to write up policies and place them for you with reputable insurance companies. In doing so, he selects companies rated financially able to repay you in case of loss . . . companies with a reputation for paying claims *promptly*.

Odd fact: National's Protection

Agent *is not obliged to insure you with the companies* in the National of Hartford Group. When he does, it is because his experience and judgment tell him National will best serve *your* interests.

That is one more reason you are urged to get in touch today with National's Protection Agent in your community.

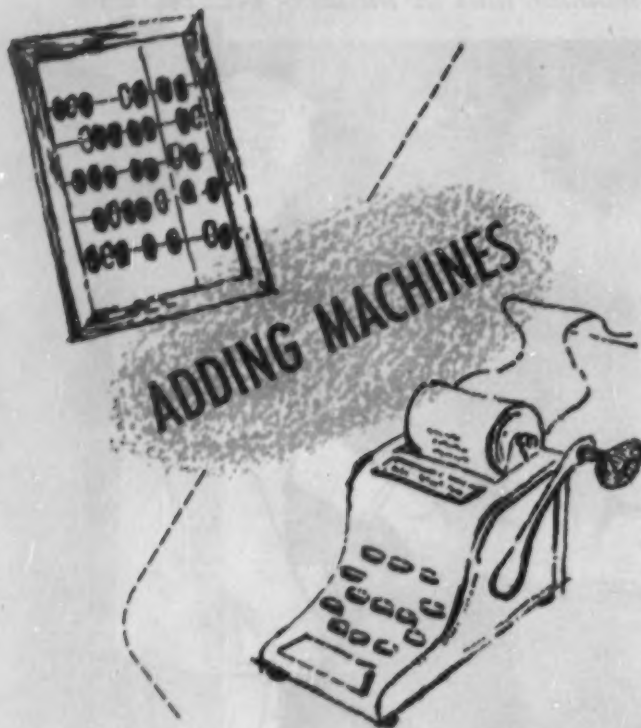


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... on the go with *Plenco*

Whether for the amazing abacus or super accurate electronic office calculators, it amounts to the same thing—modern industry is using more high quality phenolic plastics every day—and every day more users of quality phenolics are turning to Plenco.

Plenco today plays a vital role in the Plastics Industry. Its vast experience and "on the go" program of research, testing and special services are paying handsome dividends in reduced production costs.

There is a Plenco phenolic molding compound or resin to meet your production problem.



PLASTICS ENGINEERING COMPANY
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Serving the plastics industry in the manufacture of high grade phenolic molding compounds, industrial resins and coating resins.

"... ultimately, every businessman must make his own judgments ..."

SPECIAL REPORT starts on p. 90

tions. With this strategy, you forecast by detecting the symptoms of a change of phase.

Test-tube, or systematic, forecasting stems from the concept that, though changes in the natural world seem confusing and chaotic, scientific analysis can reveal certain underlying regularities. The way to find these regularities (or laws, principles, or theories) is to black out much of reality and hold only to the abstractions. Though the theories that result will be "unreal," they'll still possess tremendous power to affect the real world, provided that they are sound theories. You find out if a theory is sound by testing how it measures up when it meets with the real world: An atomic explosion confirms Einstein's $E=mc^2$; an increase in employment following a reduction in the rate of interest confirms Keynes.

• **For Mystics, Too**—All scientific economic forecasting depends on one or another, or a combination of these three strategies. Even those who make forecasting an art and cloak it in mysticism probably depend on them, too.

That's been the case with forecasting for thousands of years. The high priests of ancient Egypt preached nonsensical gobbledygook to the masses when prophesying future levels of the Nile, but secretly performed careful calculations of the river's movements. Today, many a businessman conceals or is not entirely conscious of the observations and reasoning behind his "hunches" and "instincts."

1. Who Can Use It?

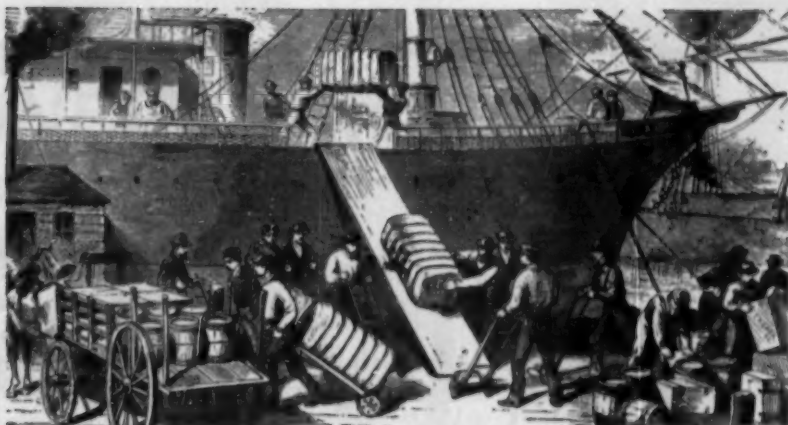
Ultimately, every businessman must make his own judgments. Whether he wants to employ a professional economist, or economic staff, or outside consultants to prepare forecasts on which he can base his judgments, depends mainly on the nature of his business and of the problems he faces. He can probably use expert counsel:

• If, like U.S. Steel or R. H. Macy & Co., his business swings a lot with the business cycle.

• If, like Westinghouse Electric Corp. or Armstrong Cork Co., he sells to a great many customers, not to just a few big ones.

• If, like General Motors, Ford, or Chrysler, he makes a product with a long production lead time.

• If, like Standard Oil of New Jersey, or Socony Mobil, he's got to



**Are your handling methods
as outdated as the 'windjammer'?**



BACK WHEN windjammers still carried the world's cargoes, YALE was taking the loads from men's backs...making Materials Handling Equipment that could do in minutes what once took hours.

Even then progressive management was quick to see these labor-aiding devices and methods as a new way to cut costs...and still increase efficiency. Today, YALE is still materials handling headquarters for industry...still developing new uses for YALE Trucks and techniques...proving again and again that *the handling costs that account for as much as 1/3 of total production expenses can be cut even further!*

Choose a YALE Industrial Truck to fit your needs from the widest line of models, fuels, capacities. For further information write: The Yale & Towne Mfg. Co., Philadelphia 15, Penna., Dept. 149.

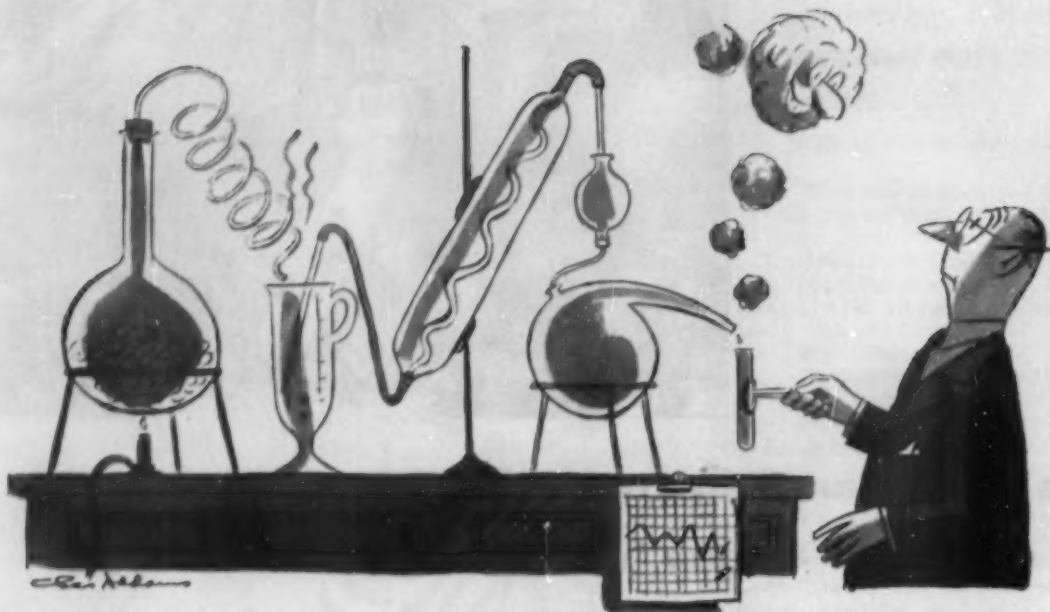
MECHANIZE HANDLING

MINIMIZE COSTS WITH...

YALE*

INDUSTRIAL LIFT TRUCKS AND HOISTS

*REG. U. S. PAT. OFF.



Scientific forecasting: The apparatus is lovely, and sometimes it gives you answers.

look several years into the future to plan capital expansion programs.

• **If, like all those mentioned, he can afford to hire good economic talent that can tell him more about the general business outlook, and the future of his own particular business, than he can get from other sources.** (Those "other sources" can include: a couple of good newspapers and magazines, business colleagues, a trade association, or government publications.)

• **Man for the job**—Companies vary enormously in what they pay economists and what they budget for economic staffs. The National Industrial Conference Board made a survey of 42 companies in 1950 to find out about these salaries and budgets, and the survey's results still seem valid. It showed that annual budgets for eco-

nomics staffs ranged from \$10,000 to \$375,000, with the average at \$38,000. Salaries paid to economists ranged from \$5,000 to \$36,000, with the median at \$12,000. The top figure would, of course, be exceeded by some professional economists, like Theodore Yntema, Ford's treasurer, who have graduated from the technician class to the highest echelon. Many companies look for their economists to rise as Yntema has done. They try to hire a man who is not simply a good technician but who looks as if he might eventually make a first-rank company officer.

But, whatever other material you might look for if you hire an economist, you want to make sure you get one who knows his trade—and knows how to forecast. This isn't necessarily easy.

Economists have a way to go before they get their forecasting techniques straightened out. Right now, there are almost as many ways of business forecasting as there are forecasters. Four causes lie behind this fact: (1) Business forecasting grew up largely on "the wrong side of the tracks"—i.e., in Wall Street and in industry—where it escaped academic codification; (2) you need different techniques to solve different forecasting problems; (3) many forecasters apparently seek to build their personal prestige by marginal differences in their product; and (4) competence and training vary widely among the forecasters.

It would take volumes to explain all the forecasting techniques used these days. It's possible though, to find the chief techniques that economists use when they're working with any of the three basic strategies of forecasting.

Getting Down to Business

Many economists—among them some who have physically left the academic cloisters—still regard economic forecasting as a low and disreputable pursuit for learned men. "We don't know enough about the past to know anything much about the future," they say. So, they suggest, business must wait another 100 years or so before it can expect the savants to say anything meaningful about the future. Meanwhile, they maintain, it is proper that they should qualify all statements about the future to the point of meaninglessness.

But the number of economists who

hold to this pure patient view of their calling is shrinking. More and more of them feel that if economics is to have any pretense of being a useful study its claim must rest on its ability to predict developments, and to provide solid foundations for policymakers to build on.

• **Pushed Into It**—One of the chief reasons for the fact that more of them are overcoming their inhibitions about forecasting, and are concentrating on improving its techniques, is that they're being immersed deeper and deeper in government and business, where eyes are always on the future.

I. Grabbing the Future

For the "Loaded Deck" strategy, there are four techniques:

Inside information. The technique is simple: Be an insider, know an insider, or pay money to somebody who says he will get inside information for you.

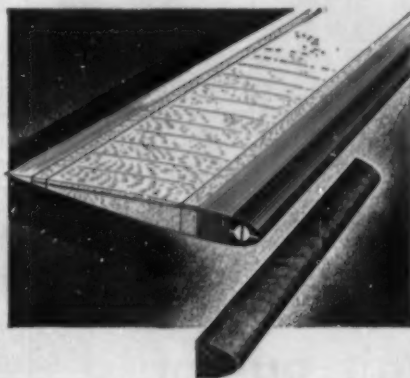
Fast information and analysis. Typical problem: Should we step up production next week, and, if so, in what product lines? What kind of orders will we be getting from our dealers? Technique: Find out what the dealers are selling this week by getting

BUSINESS IN MOTION

To our Colleagues in American Business ...

When close dimensional tolerances are required in an extruded shape, plus heightened tensile strength, and a fine finish, the shape is drawn through a die after extrusion. If there are special requirements as to straightness, the shape may also be straightened, as necessary, either by hand or by machine. These processes are expensive, but they produce a product that is accurately pre-formed, so that machining is markedly reduced, so much so as to effect remarkable savings. However, there is another way to take advantage of the economy of extruded shapes. Sometimes a "plain extruded" shape will do, thus saving the time and expense of drawing and straightening.

It all depends on what is really needed. Revere had an outstanding example of this recently. A rush order was received, and we could not meet the requested delivery date because of the time required to make new extrusion dies. On being told this, the purchasing agent visited our mill to see what could be done. A mutual study of the facts showed that the shape is to be applied to the leading edges of helicopter blades, and that both the shape and the wood are routed to make a close fit for the application of an adhesive. The shape is also tapered. Several things became evident. First, the original specifications were tighter than required. Second, shapes produced by the customer's original die, in our possession, would be slightly oversize, but not enough to be significant, in view of the subsequent machining. Third, by using



that original die, and eliminating drawing, we could fill the order on time — and save the customer six cents a pound as well.

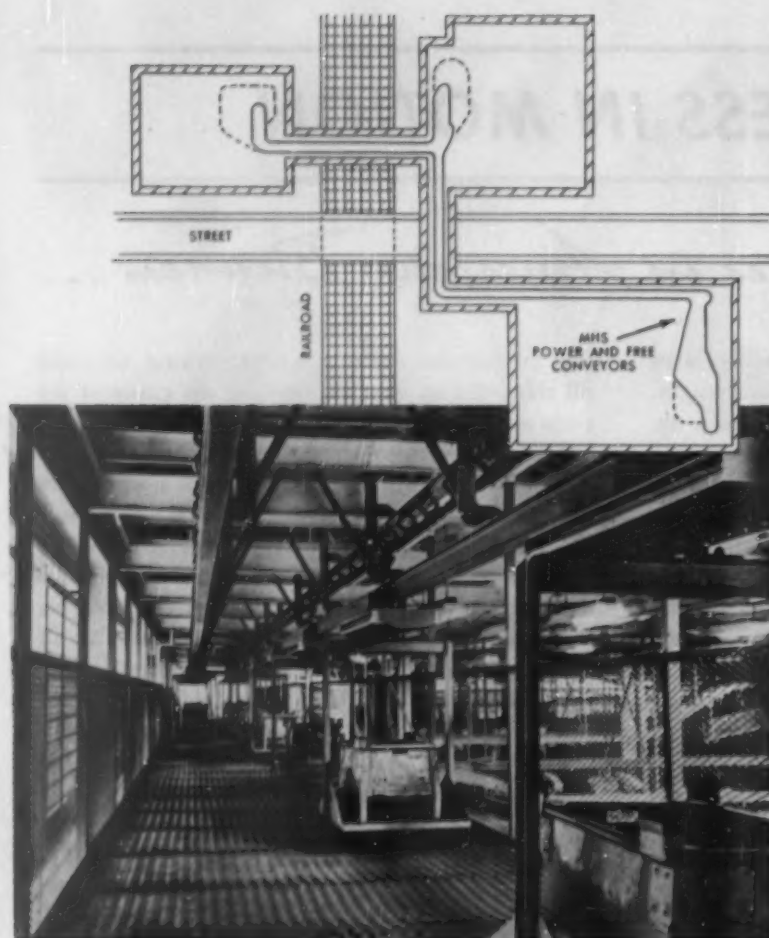
Now that we both knew that some of the dimensional and physical tolerances were not absolutely necessary, Revere was able to go ahead. The die was put in one of our extrusion presses, the metal forced through it, cut off to exact lengths, and shipped. This made it possible for the customer to complete his first blade on the day specified in his contract. We all worked fast, but no matter how quickly we labored, we could not possibly have met the essential delivery date on the basis of the original specifications. Close collaboration on what we call Quality Control provided the solution. Incidentally, brass was chosen for the part, because of its density, its resistance to corrosion, and the ease with which it can be machined.

Both our customer and ourselves are proud of the accomplishment reported here. It was made possible only by a thorough examination by both of us of the entire background of the order, the fabrication methods and end use, plus what the mill could do if it did not have to make new dies. We would like to suggest that when, as sometimes happens, a supplier cannot meet a date on a special order, you sit down with him and examine specifications to see if they really need to be so tight. You may find that a more or less run-of-the-mill product will do, thereby saving much time and money too.

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Knowledge of limits that can't change much through the forecast period. Typical problem: What will be the volume of durable goods production during a period of great defense expansion and booming demand? Technique: Find out how much steel the government intends to make available for civilian production.

Spotting the initial phase of a lengthy process. Technique: Investigate your field, working with such knowledge as: (1) Construction contracts awarded are the first phase of future building starts; (2) orders received by manufacturers are the first phase of the coming volume of production; (3) plans for capital spending programs precede new investment.

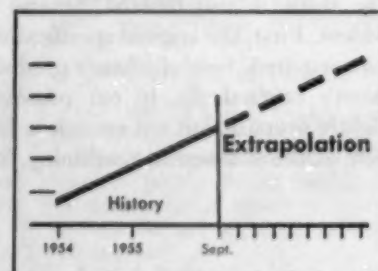
In all such loaded deck forecasting, it sometimes happens that the deck is unloaded against the forecaster. Life never runs out of surprises. But if the information is sound, a forecast based on present facts and linked closely to developments in the near future will generally be realized.

So these techniques have, and always will have, importance for anticipating particular situations and problems. But their usefulness in forecasting a broad and complex economic picture is limited. You can't necessarily get the scoop on the next development of the American economy by being a personal friend of the Secretary of the Treasury. On the other hand—don't cut him.

II. Watching It Grow

You get four chief techniques in the "Oaks-from-Acorns" strategy, too.

Trend extrapolation. Extrapolation is a six-bit word borrowed from the mathematicians. In this case it means predicting the future movements of an economic factor by projecting into the future the trends you know it has taken in the past. On a chart, an extrapolation looks like this:



• **Gap in the System**—What makes an extrapolation useful to a forecaster is the statistical fact that a trend that's advancing will keep advancing—at least until something else happens. Unfortunately, the technique won't tell

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"... debate still rages over 'leading' business indicators ..."

SPECIAL REPORT starts on p. 90

you when the "something else" will come. For instance, a wage series that's pushing upward will tend to push prices upward, and that will tend to push wages up again—only not ad infinitum. Eventually, some other series, like a falling sales volume, may halt or reverse the upward wage-price spiral.

But if, in your business, you don't need to care much about cyclical swings around a trend—if, for instance, you're figuring out the number of telephones or kilowatt hours the American people will want to use in the next 10 years—trend extrapolation is a useful technique.

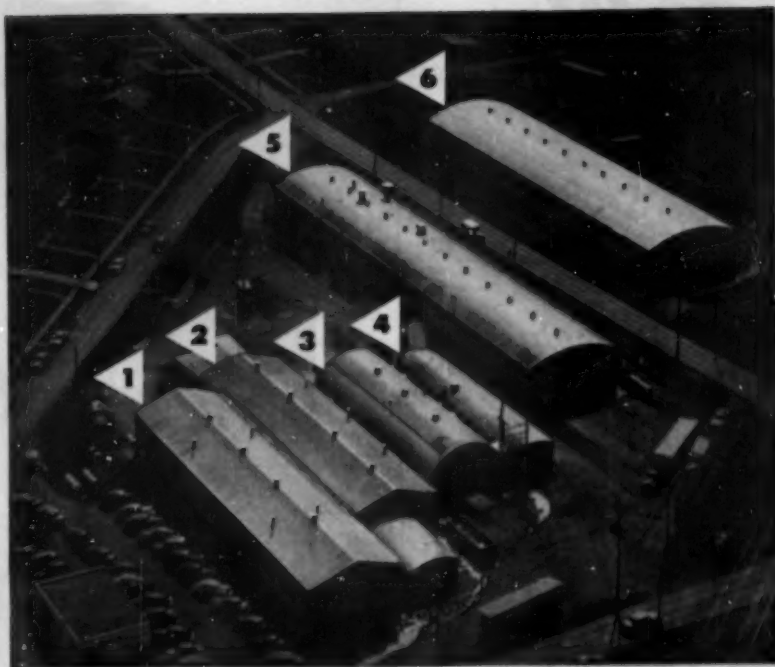
Of course, you can put trend extrapolation to work in a more sophisticated way than simply by laying a ruler over the past direction of a business indicator and projecting it on into the future. If you sell books or whiskey you may find your sales correlate nicely with the trend of disposable personal income, or if you sell oil or copper your sales may link up well with the Federal Reserve Index of Production.

"Leading" series. Andrew Carnegie constructed his own leading series for economic forecasting—by counting the smoking factory chimneys he saw. His was the archetype of the technique.

In the 1920s a hot search was on for a sort of economic philosopher's stone—a single business indicator that would always lead general business development. Some thought it lay in stock market activity; others saw it in interest rates, pig iron production, carloadings, or Dun & Bradstreet's index of business failures. Debate still rages over which of these are "old wives' indicators" and which possess real leading characteristics.

• **Search Goes On**—The outstanding hunter for indicators with forecasting value is the National Bureau of Economic Research. It has been scrutinizing masses of business cycle data for more than three decades. Before World War II, Wesley C. Mitchell, the bureau's guiding genius, and Arthur F. Burns, now chairman of Pres. Eisenhower's Council of Economic Advisers, examined hundreds of series, picked a set of 21 leading, coincident, and lagging indicators, whose movements had regularly traced the course of the business cycle.

After the war, the bureau's Geoffrey H. Moore set to work updating Mitchell's and Burns's work. Moore examined 801 monthly and quarterly



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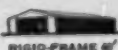
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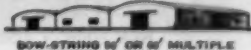
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*Lost-horse forecasting: Where would you
go if you were the gross national product?*

indicators, selected 21, some of which were the same as those chosen by Mitchell and Burns. Of the 21, Moore's eight leading series are: residential building contracts, commercial and industrial building contracts, new orders for durable goods, prices of industrial common stocks, wholesale prices of basic commodities, average work week in manufacturing, new incorporations, and business failures.

These indicators do regularly lead the business cycle's turns—though there's argument over just why this happens. But the chief trouble with them is that they are all extremely sensitive. They oscillate a great deal from month to month. So it's hard to know, when making a forecast, whether an up or downturn in one or another of the leading series means the real McCoy, or whether it's only a temporary wiggle.

Diffusion indexes. To find the

meaning of those upturns and downturns, the bureau has invented a thing called the diffusion index. The bureau developed the index after it discovered that business cycle movements "have invariably been preceded by a remarkably regular cycle in the proportion of industrial activities undergoing expansion or contraction."

Forecasters make the index by counting the number of indicators in a given group that are rising at a given time. They convert this into a percentage of the number of indicators in the group. The bureau labels this percentage as a diffusion index because it believes it shows how widely diffused economic movements are. The bureau's diffusion indexes generally reach their peaks and troughs six months to 12 months ahead of the peaks and troughs of general business activity.

• **Doubtful Quantity**—Not all econo-

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"...not all economists think the diffusion index is a step forward..."

SPECIAL REPORT starts on p. 90

mists think the diffusion index is much of a step forward. Arthur L. Broida, a Federal Reserve Board economist, maintains that it isolates cyclical turning points from all other changes in the economy's direction some time after the event. He holds that the index shows nothing different from what statisticians have long achieved by noting rates of growth and decline of a series of indicators. Their notes have already shown that a slower rate of increase in an index generally precedes its downturn.

Wright's indicator. This device for determining real turns in the business cycle is named for its inventor, Ashley Wright, a Standard Oil Co. of New Jersey economist.

Wright's gimmick is to make shrewd use of the normal distribution curve, which looks like this:

A Bell-shaped Curve



Because of its appearance, this is also called the "bell-shaped curve." The statistical concept behind it is simply this: Divergences from a "norm" or average will tend to cluster in a bell-shaped curve, because the small divergences are more frequent than the large ones, the very large divergences are rare, and divergences of the same size are equally likely to occur on the plus or minus side of the norm.

Wright put the theory to work when he found that upturns and downturns of a large number of business indicators tend to cluster in a bell-shaped curve, and that the peaks and troughs of the curve show up the turning points of the general business cycle.

• **Recession by Numbers**—For instance, suppose that 40 business indicators begin to turn downward, as follows:

Month	Number of Series That Turned Down
January	2
February	4
March	6

There it is March, and 12 of the series have already turned down. You



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must be headed for a turn in the general business cycle soon. It will come at the point where the mass of down-turning business indicators cluster. Sure enough—

April	9
May	8

You've undoubtedly passed the turning point, because 29 of the 40 business indicators are now dropping. From now on they'll thin out—

June	5
July	4
August	2

And there you are—in a recession, at the point where all your business indicators have turned down. You can start watching now for upturning indicators.

• **Handling the Figures**—Wright bases his forecasts on his estimate of where the center of the bell-shaped curve, outlined by the rise and fall of the indicators he has chosen, will be.

Several of the 40 business indicators that Wright uses—slab zinc shipments, wholesale prices of hogs, gum rosin, and medible tallow—are of trivial importance in relation to broad economic developments. But Wright frankly selects them, not for their general economic significance, but for their consistent behavior during turns in the business cycle.

• **Difficult, But . . .**—The turn-spotting techniques are admittedly imperfect devices. They are often difficult to interpret. When they show a downturn it's often hard to know whether it's to be a mild or severe one. And, when you allow time for gathering the necessary data, they usually give only a few months' lead on cyclical turns.

These are serious limitations. Nevertheless, a man whose business lives or dies by his skill at anticipating major turns in the business cycle will ignore at his peril the signals he might get from these leading series devices.

III. Ranging the Field

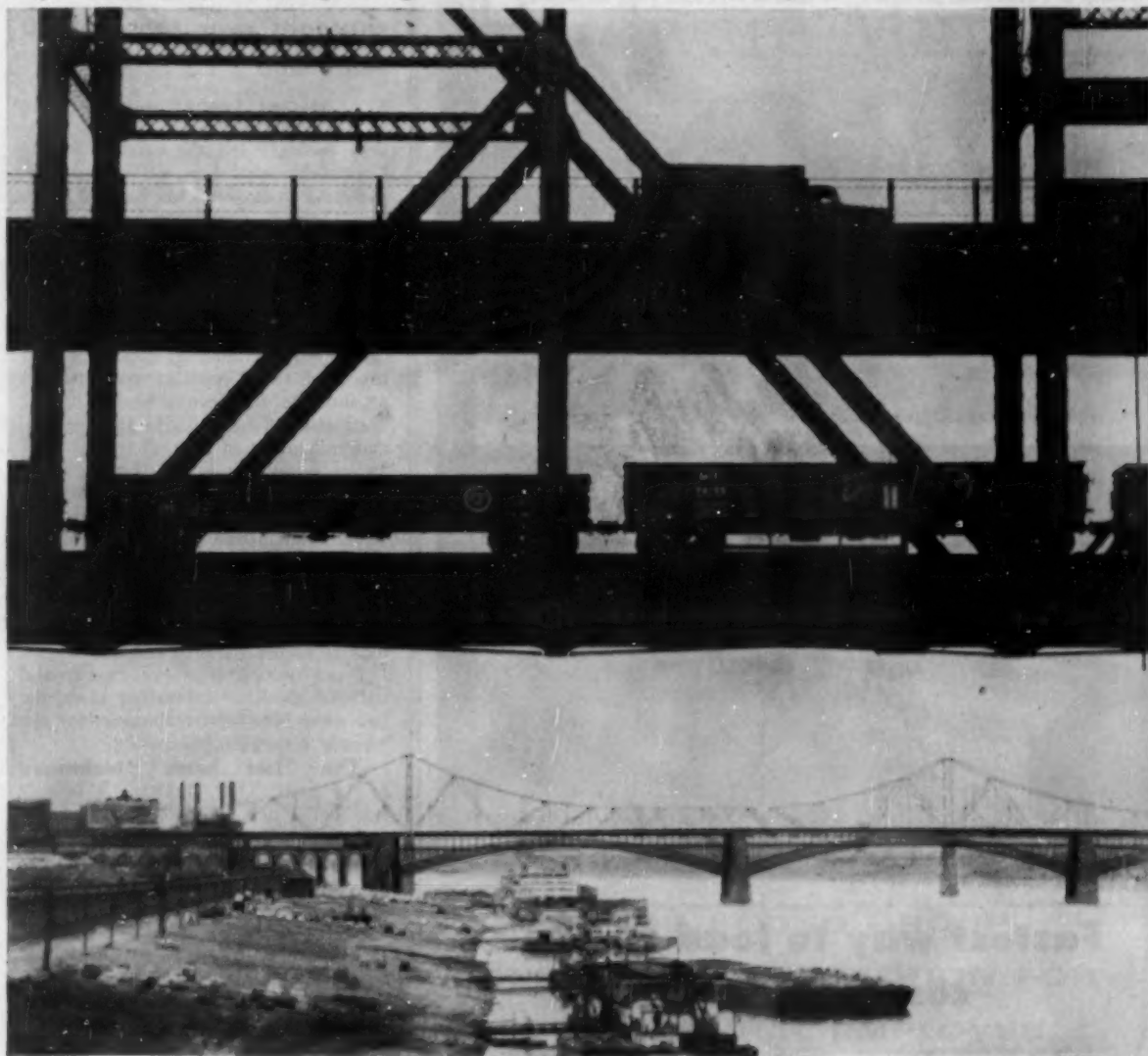
Test-tube or systematic forecasting is the classic strategy of economic analysis. The technique here is to discover enduring relationships among economic factors and apply them to situations in the past, present, or future.

Analyzing the general business picture and making quantitative estimates of what conditions may be like a year or more ahead requires all the theoretical training, knowledge of institutional and statistical facts, technical skill, and political insight that an economist can command.

• **Aid for the Searchers**—In dealing with comprehensive forecasting problems, economists today have two tremendous advantages over those who worked 20 years ago.

The first is economics' own "unified

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" . . . economists today have two tremendous advantages over those of 20 years ago . . . "

SPECIAL REPORT starts on p. 90

field theory." It's the product of the Keynesian revolution (BW—Jan. 8 '55, p104). Before John M. Keynes wrote his "General Theory of Employment, Interest, and Money," economic theory tended to be fragmented into separate theories of wages, money, foreign trade, and so on. None of these separate principles had much relationship to each other. Economists may argue how much of the Keynesian revolution is attributable to Keynes himself. But there can be little doubt that general comprehension of how all the parts of an economy mesh together has advanced greatly since the mid-1930s.

The second advantage is the system of national income accounts developed since the early 1930s by the Commerce Dept. and the National Bureau of Economic Research. These give the economist a detailed and comprehensive picture of the national economy.

From unified economic theory and national income accounting stem the two most important techniques for systematic economic forecasting.

The "lost horse" technique is the first. That, anyway, is how it was christened by Sidney Alexander, Columbia Broadcasting System economist. He took the name from the old gag about how to find a lost horse. You do it by going to where the horse was last seen and asking yourself where you would go from there if you were a horse.

When you take that theory off the farm and put it to work in general business forecasting, each component of the gross national product (consumption, expenditures, gross private domestic investment, net foreign investment, government purchases of goods and services) plays the part of the lost horse. The analyst first finds out where each of these was when last reported by the Commerce Dept.'s National Income Div.

But how he answers the question of where each section of GNP is going depends on his skill, patience, insight, and information.

An economist who wants to fake impressively can simply guess figures for each part of the coming year's GNP. (Projecting gross private domestic investment at \$49.6-billion is obviously more impressive than projecting it at \$50-billion.) If there were state licensing boards for economists, a forecaster caught doing this would be convicted of malpractice and sentenced to run

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For angle-working, and figure-faking, and similar crimes obscene—to pay for his blooper he's put in a super and chained to the adding machine.

a checkout register in a supermarket for the rest of his days.

• **Honesty's Realm**—But the honest economist will go deeply behind each component of GNP when he prepares his forecast. He will study government plans and policies, analyze budget estimates, weigh the likelihood of the passage of important legislation and attempt to estimate the price tags the various bills will bear.

He will look behind private investment at the factors affecting the capital goods industries, study ratios of inventories to sales and of production to capacity. He will look at the factors that affect building construction, such as credit terms, availability of mortgage money, vacancy rates, rents, and price movements. He will measure his analysis against the findings of capital spending surveys.

He will try to gauge the effect of government fiscal policies on private investment and consumption, estimate the relationship between the growth of investment and consumption. Then he will see how money credit conditions may affect people's spending or saving, their liquid assets, their supplies of durable goods. And he will measure this against the finding of consumer intention surveys.

He must put all these parts together to make a whole—but he must also carry in his mind an image of how the whole

will affect the parts. He will also have to sense how non-economic factors—like international relations and national elections—will affect the picture.

• **Endless Job**—Since the task of preparing a forecast of the national economy can be almost endless, the economist must figure out the point at which he has all the information he can handle. But, at best, the time he has for these analyses is always pretty short, since he must base his forecasts on the most current information. If he takes too long, his facts grow cold. The best course for the forecaster is to stay at his task continuously, constantly modifying his forecast on the basis of new information.

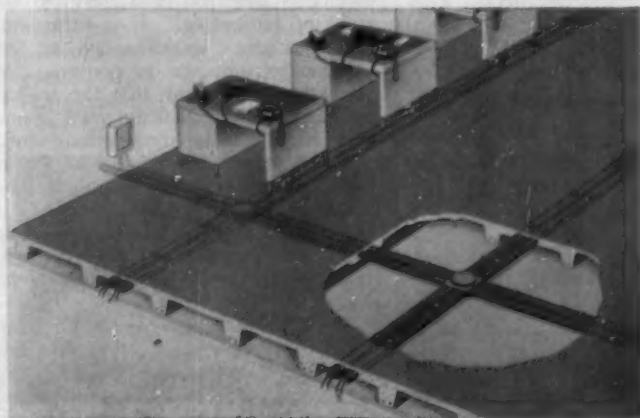
The only way to judge whether an economist has done a thorough sensitive forecast—or blooped his way through one—is to examine carefully the details of his analysis. Of course, a lost horse analysis depends a lot on the economist's subjective judgments about the data he receives and on his somewhat "artistic" perception of relations. So all of his analysis may not show on paper.

IV. The Elegant Way

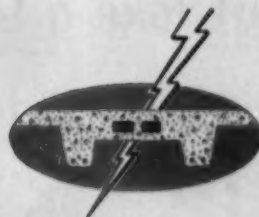
A more rigorous way of tackling the problem of what will happen to the millions of factors and relations that make up the national economy is to



Cafritz Office Building, Washington, D.C., where electrical flexibility is provided by R/C Duct Floors formed with Ceko-Meyer Steelforms. LeRoy L. Werner, Architect / Beall & LeMay, Structural Engineers / Cafritz Construction Company, Builders



Standard electrical distribution ducts are buried in the monolithic structural concrete. No additional fill or expensive topping is needed. Electrical connections are provided as close as every 2 feet along the ducts.



Ceko electrified concrete joist floors cost 19% less than cellular steel...

provide outlets every 2 feet along ducts... in rigid structural concrete

The end objective of any construction project can be posed by this simple question: "How can I build better at less cost?" There is a way, for business buildings—and that's with R/C Duct Floors provided by Ceko-Meyer Reinforced Concrete Joist Construction. Extensive use of automatic office machines makes conveniently placed electrical outlets a necessity today. That's done best with R/C Duct Floors. For they provide a network of underfloor electrical ducts buried in rigid structural concrete. Capped outlets every two feet along the ducts are easy to open without drilling into the floor. They afford ample connections for all business machines, telephones and intercom... eliminate tangled extension cords. And this is done at a saving, too, because studies prove R/C Duct Floors cost approximately 19% less than cellular steel floors. An example of this improved, less costly way of building is the Cafritz Office Building, Washington, D.C. Before building, consult Ceko Engineers in the pre-planning stage. They can show you how to save with rigid reinforced electrified concrete floors. **(CECO STEEL)**

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"... to see if he has blooped his way through his forecast, examine the economist's analysis . . ."

SPECIAL REPORT starts on p. 90

build an econometric model of the economy. The method here is related to the lost-horse technique, but it's a lot more elegant, for the practice of econometrics is one of blending economics, mathematics, and statistics.

• **Step by Step**—An economist starts to build a model by first selecting an economic theory, or set of theories, that he believes will take into account all the significant factors likely to affect the general business or particular industry situation that he is forecasting.

He translates the theory into a set of mathematical equations (see illustration, page 120) that make up his econometric model. The equations relate the factors he wants to discover (the dependent variables) to the factors he already knows, or can estimate easily (the independent variables). These independent variables can be of two types: first, those that are historic facts, such as last year's profits or inventory spending; and second, future elements, such as government spending, that can be estimated from advance information.

The econometrician bases his forecast on the past relations between the dependent and independent variables. He assumes that relations that were stable in the past will remain stable in the future. Of course, the relation between large economic aggregates, like consumption and income, won't be perfectly stable. So the question the forecaster must first answer is: "Will they be stable enough, within some estimated range of probability, to be used for forecasting?" If it turns out that they aren't stable enough for the job they're supposed to perform, the forecaster can assume that the theory behind his equations is not valid. Even then he has achieved something—and, in this way, econometrics can be a useful technique for junking false economic theories.

• **Not All Approve**—Econometric models come in for plenty of criticism from forecasters who stick to other techniques.

One of the chief complaints against them is that they make complex mathematical operations on data that is too rough to permit such manipulation. Stephen M. DuBrul, a General Motors economist, says that to apply intricate econometric techniques to the rough



Grumman Peconic River Plant in Calverton. Architects: Office of Alfred Easton Poor; consulting engineers: Seelye Stevenson Value and Knecht and Guy B. Panero; air-conditioning contractors: J. L. Murphy, Inc.—all of New York, N.Y.

Grumman jets are made in a factory that "breathes"

New Grumman aircraft plant is completely closed in and soundproofed. American Blower equipment is used to create a controlled, comfort-conditioned indoor climate.

The new Peconic River Plant of the Grumman Aircraft Engineering Corporation, in Calverton, L.I., N.Y., is one of the first aircraft factories built solely for jet assembly and flight operations.

A major designing problem was: how to eliminate the ear-splitting racket of jet engines starting up outdoors—highly distracting to employees involved in intricate manufacturing processes.

The solution: soundproofing—including double-paned, sealed-shut windows. And this posed an air-conditioning problem. For the factory, thus soundproofed, was virtually airtight!

To circulate fresh, conditioned air in a continuous cycle—and to exhaust heat, fumes, and stale air—a comfort-conditioning system was installed that, in effect, resulted in a factory that "breathes". . . a system built around American Blower Supply and Exhaust

Fans, Air Conditioning Units, Sprayed Coil Dehumidifiers, Heating and Cooling Coils, Vaneaxial Fans, Venturafin Unit Heaters, and necessary accessories. This gave the Peconic Plant complete humidity and temperature control, providing maximum working comfort and efficiency.

American Blower engineers are familiar with the special air-handling and air-conditioning problems of many industries. For assistance or technical data, contact our nearest U.S. or Canadian branch office.

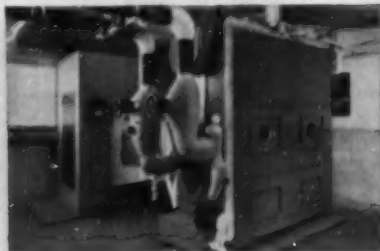
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AMERICAN  BLOWER



Deadly Grumman Cougar thunders over Long Island in test flight. Noise of jet take-offs dictated soundproof plant construction.



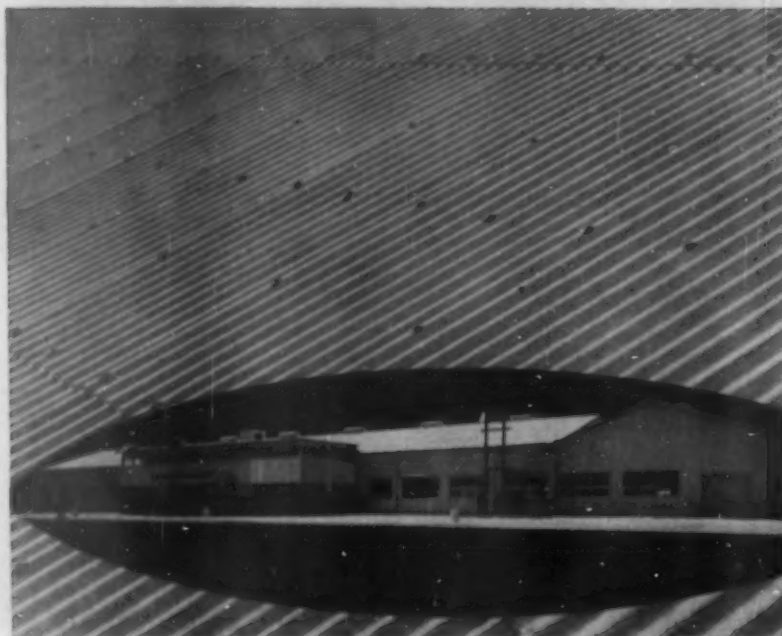
Pleasant indoor climate for offices in administration building is created by using American Blower Air-Conditioning Units.



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Men who plan industrial construction are fast recognizing the many cost-saving advantages of "Century" Corrugated Asbestos Sheets. Made of two permanent, highly fire-resistant materials—asbestos fiber and portland cement—these sheets have remarkable strength, toughness, and density. They won't burn, rot, or corrode. Year after year, they'll withstand the ravages of weather, vermin, and insects—without ever needing protective painting. Rarely requiring maintenance, "Century" Corrugated Asbestos Sheets hold upkeep costs to the barest minimum.

• **Low Application Costs**—These sheets go on fast, are easily sawed, drilled, and fitted right on the job.

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data that's available is "gold-plating crowbars."

Other charges leveled against econometric models are that they:

- Are based on static, not dynamic, theories.

- Deal in large, meaningless, catch-all concepts, such as consumption, instead of dealing with markets for specific types of consumer goods and services.

- Imply an economy based on "economic man" and don't allow for the often unpredictable reactions of people, which can make for big changes in an economy.

But econometricians keep building their models and trying to improve them. They try to fit more factors into their figuring to overcome the complaints that their models are mechanically unsound and insensitive to social movements.

- **National Picture**—There are plenty of econometric model-builders at work to handle this task of improvement.

At Michigan University's Research Seminar in Quantitative Economics, three econometricians, Lawrence Klein, Daniel Suits, and Arthur S. Goldberger, have built a 25-equation model of the U.S. economy. They've been operating it for three years and its forecasts for 1953 and 1954 came close to actuality.

They don't look on their model as a once-and-for-all job, but are continuously testing and strengthening it. When a forecast turns out to be off the mark, the Michigan group probes into the machinery of the model to find out just where the fault lies, changes the model to try to correct the mistake next time. And to make the model more realistic, the group is also making intensive studies of particular sectors of the economy, including the construction industry, foreign trade, agriculture, and the money market.

Econometricians at other U.S. universities are working on models of their own. The nation's econometric capital has just shifted from Chicago to Yale University, with the migration there of the Cowles Commission for Economic Research. Along with the commission, the headquarters staff of the Econometrics Society shifted to Yale, too.

- **Models All Over**—Abroad there's plenty of research going on with the models. The Dutch, Norwegian, and Canadian governments are developing models of their own economies to help them with their economic policy-making.

The Dutch model has been operating since 1952. Opinion among economists in Holland is that the model has forecast the general direction of Dutch economic developments fairly accurately and that it has contributed



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flows one of humanity's highest hopes*

A dreaded shadow lifts, and the clear light of science once again drives back the outer darkness. Such a great event, so close to a miracle, is often then beset with technical problems. How to bring it to the millions who anxiously await it? How to give it to them exactly as it should be given, with scientific precision, for greatest benefit?

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**"... industry's economists
are getting into the model-
building field..."**

SPECIAL REPORT starts on p. 90

to the molding of a more rational government economic policy. The model was put together by a noted Dutch economist, Jan Tinbergen. It was he who built the first econometric model of the U.S. economy for the League of Nations in 1939.

Chief man working with the Norwegian model is Ragnar Frisch, to whom Harvard University has just awarded the first Schumpeter Prize for "genius and leadership in the use of rigorous scientific methods in the social sciences." Three research centers have a hand in the Norwegian model—Oslo University's Institute of Economics, the Central Bureau of Statistics, and the Finance Ministry's Budgets division. As of now, some 90 variables have been built into the model—and it's still being tested.

Lawrence Klein designed the econometric model that the Canadian government is developing. It, too, is still in the experimental stage. The Canadian government plans eventually to use it for forecasting but this probably will not happen for several years.

• **Simpler for Business**—Industry's own economists are beginning to get into the model-building field. For industry's purposes the models have been simplified. Management has found them useful for doing one of the principal jobs for which business is turning to economists: helping guide planning for capital spending and expansion programs (BW—Mar. 5 '55, p. 66) by producing long-range projections of specific industries' places in the national economy.

Some industry economists like Standard Oil Co. of New Jersey's Cecil Burrell, Allied Chemical & Dye Corp.'s Avram Kisselgoff, CBS's Sidney Alexander, and Ford's William Flaherty believe econometric models will in time prove of great value to business as well as government. They say the models provide the best technique yet developed for organizing massive and complex statistical data, for cumulating knowledge and profiting from past errors and successes, and for systematizing the whole forecasting process.

It's All Your Bet

Each of the forecasting techniques set forth in this report (and the many variant methods) has its weaknesses and disadvantages for dealing with particular problems of economic prediction. So it would be foolish for a businessman or an economist to bet his future on one

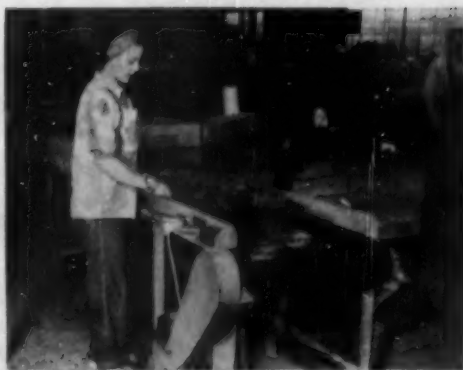


Headwork instead of handwork

These Balinese belles learned the basic principle of materials handling years ago . . . *they use their heads instead of their hands!* Industry, too, is using "headwork" instead of "handwork" to speed materials through production or processing. They have long known that taking the hands out of handling by using conveyors, increases plant efficiency and lowers cost.

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Why not have a Chain Belt Field Sales Engineer review your materials handling problems or your power transmission needs? You'll find his "headwork" a big help in reducing costs . . . improving efficiency. Write CHAIN Belt Company, 4726 W. Greenfield Ave., Milwaukee, 1, Wis.



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method to the exclusion of others.

Each is useful for confirming or refuting the picture that's revealed by other methods.

• **Quick Selection**—If there's neither the time nor the resources for a businessman to use all the techniques simultaneously, he can choose among

them easily—by working on the principle that the method that gives him his answer most simply is the best one.

If his business is to supply whoosies

The Junior Econometrician's Work Kit.

Predict the U.S. Economy for 1956.

Build Your Own Forecasting Model.



DIRECTIONS:

1. Make up a theory. You might theorize, for instance, that (1) next year's consumption will depend on next year's national income; (2) next year's investment will depend on this year's profits; (3) tax receipts will depend on future Gross National Product. (4) GNP is the sum of consumption, investment, and government expenditures. (5) National income equals GNP minus taxes.

2. Use symbols for words. Call consumption, C ; national income, Y ; investment, I ; preceding year's profits, P_{-1} ; tax receipts, T ; Gross National Product, G ; government expenditures, E .

3. Translate your theories into mathematical equations:

$$(1) C = aY + b$$

$$(4) G = C + I + E$$

$$(2) I = cP_{-1} + d$$

$$(5) Y = G - T$$

$$(3) T = eG$$

This is your forecasting model. The small letters, a , b , c , d , e , are the constants that make things come out even. For instance, if horses (H) have four legs (L), then $L = aH$; or $L = 4H$. This can be important in the blacksmith business.

4. Calculate the constants. Look up past years' statistics on consumption, income, and so on. From these find values for a , b , c , d , and e that make your equation come out fairly correct.

5. Now you're ready to forecast. Start by forecasting investment from this year's profits. Look up the current rate of corporate profits—it's around \$42-billion. The model won't tell what federal, state, and local governments will spend next year—that's politics. But we can estimate it from present budget information—it looks like around \$75-billion.

6. Put all available figures into your model. (We've put in the constants for you.)

$$(1) C = .7Y + 40$$

$$(4) G = C + I + 75$$

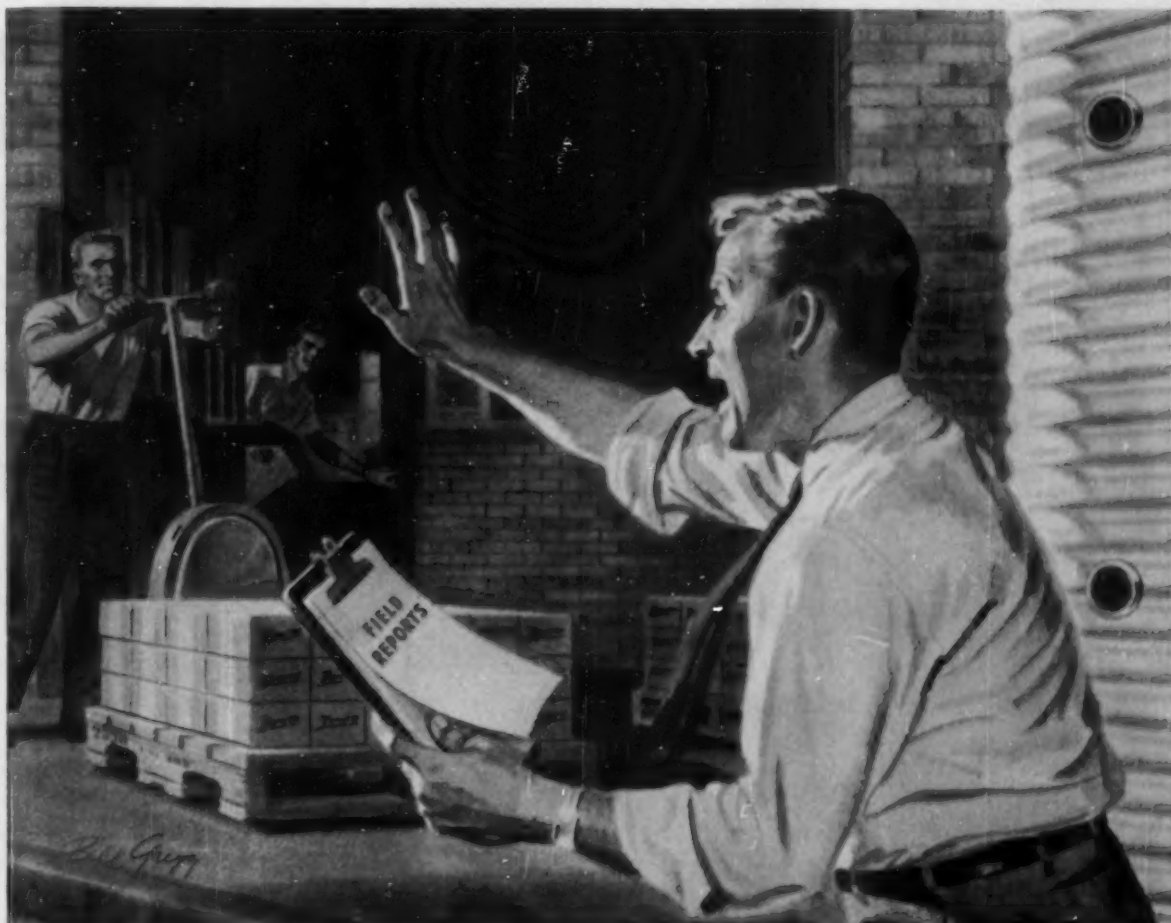
$$(2) I = .9 \times 42 + 20$$

$$(5) Y = G - T$$

$$(3) T = .2G$$

7. Solve the equations. You want values of C , I , T , G , Y . Hints: Do them in this order—(2), (1), (4), (3), (5). In solving (1), remember that I and E are both part of G , $Y = G - T$, and $T = .2G$.

8. Results. (See if yours are the same.) For 1956, consumption will be \$260.0-billion; investment, \$57.8-billion; GNP, \$392.8-billion; tax receipts, \$78.6-billion; national income, \$314.2-billion. These results are guaranteed—provided that the theories on which they're based are valid.



The day Zenith refused to fill thousands of orders

Back in early 1953, Zenith was about to market a new and revolutionary hearing aid which featured transistors instead of bulky vacuum tubes. These tiny transistors—the “powerhouses” of electronics—slashed battery operating costs, required only one battery instead of two, and promised a much longer life.

We ordered our transistors from a large electronics supplier and installed them in a pilot run of our tiny new hearing aids. Then, in line with our policy of *double testing* every Zenith product, both civilian and military, we sent the aids to our laboratory—“Phase One” in our testing procedure. They passed with flying colors.

Then, even though competitive models were now being offered for sale, we submitted our new hearing aids for *field and life testing*, “Phase Two” of the rigorous test series through which all new Zenith models must pass.

This field and life testing was done by a selected group of hard-of-hearing physicians, scientists and other qualified hearing aid users who tested the new product in everyday use, under every possible condition! Their reaction was

so enthusiastic that we tooled up, built an inventory, and planned to hit the market on April 6, 1953.

Then it happened. The transistors in the new hearing aids began to *fail* due to a complication that could *only* be discovered by prolonged actual use!

This, at a moment when production lines were running at full speed . . . when a gigantic advertising program was ready to be launched . . . when dealers were shouting for shipments . . . when consumers by the thousands were begging for new hearing aids!

In the face of all this, we called the whole thing off.

We refused to fill thousands of orders that had already poured in. We refused to give our customers a hearing aid that might fail when it was needed most. We urged people to continue buying the reliable vacuum tube model until transistors were perfected.

And perfected they finally were. After again assembling the new transistor hearing aids . . . after again testing them in the laboratory and in the field, Zenith finally offered them to the public in

November, 1953. At long last, here was a transistor hearing aid which would *not* fail those who depended upon it . . . a new, *quality* hearing aid which had finally earned the right to bear the Zenith insignia.

This story is just one more example of Zenith's insistence upon testing, re-testing, and absolute perfection. It is one reason why Zenith is called upon so frequently by the Government to turn out always-dependable weapons of defense. Our 36 years of specialization in radionics has created a Pledge of Quality which remains inviolate: *always the best of everything . . . in everything that Zenith makes.*



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"... a businessman is a sucker if he doesn't try to get the best odds ..."

SPECIAL REPORT starts on p. 90

for General Motors, and for General Motors alone, the obvious way to get a forecast is for him to ask General Motors how many whoosies it thinks it will need.

If he's making a product, like color television, that's new and has a market that doesn't correlate well with any broad economic movements, it probably makes more sense for him to forecast his business from what his salesmen or his market research outfit can tell him, rather than to expect his economist to give him a firm answer.

On the other hand, if a businessman has an inventory, production, or long-run demand problem, and if the movements of a dozen or more factors can affect his future, the job of forecasting may call for some high-class economic analysis—either by the company's own economic staff or by an outside consultant.

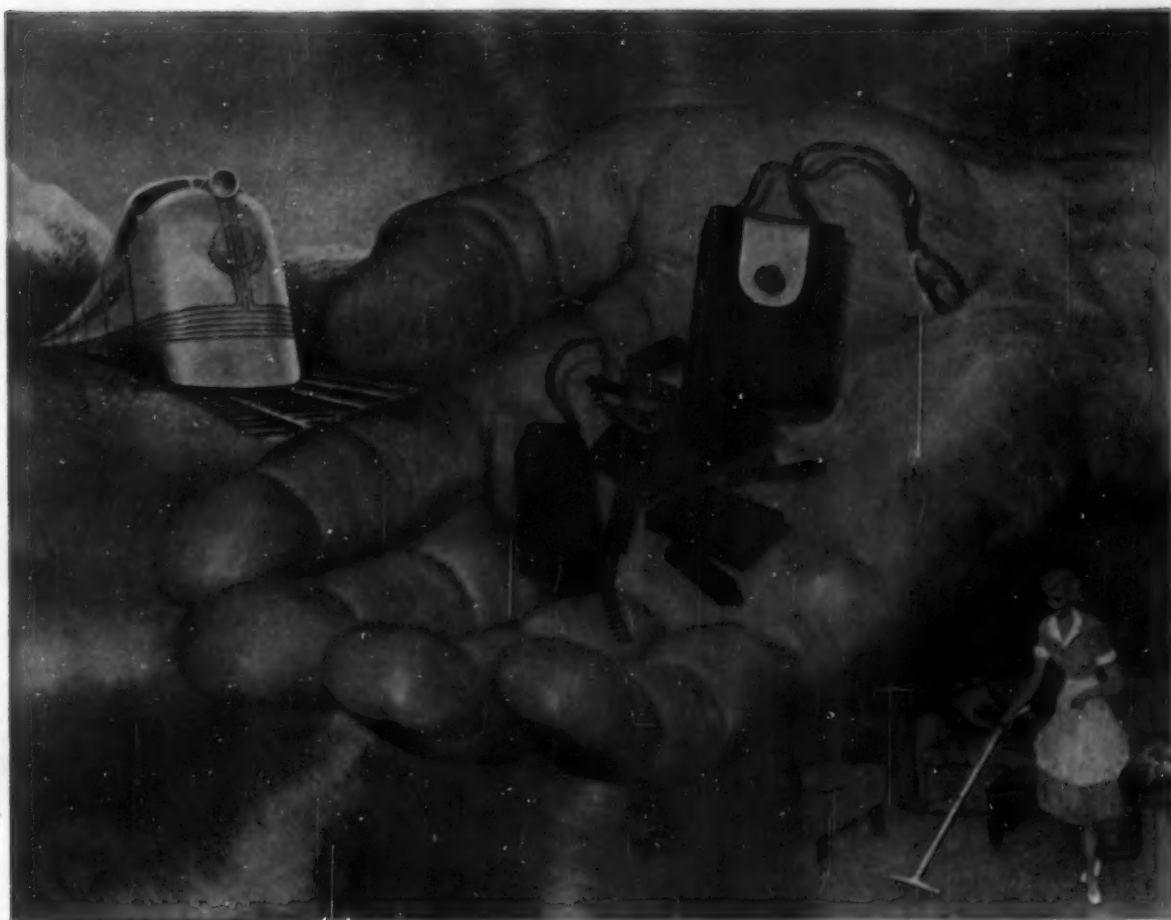
• **Man With the Chips**—But ultimately, every businessman must be his own forecaster. He's the one who makes the decisions. And his decisions must be based on his own final forecasts. His decisions will show the extent to which he has accepted or rejected—or ignored or misunderstood—the forecasts prepared for him by others.

The ancient folk saying that "business is a gamble" still hasn't lost its profundity. But a man is a sucker if he doesn't try to get the best odds in that gamble.

His odds must improve if he acts on the basis of full information, knowledge of the movements of economic indicators, and careful analyses of how changes in the big economic picture may affect his business.

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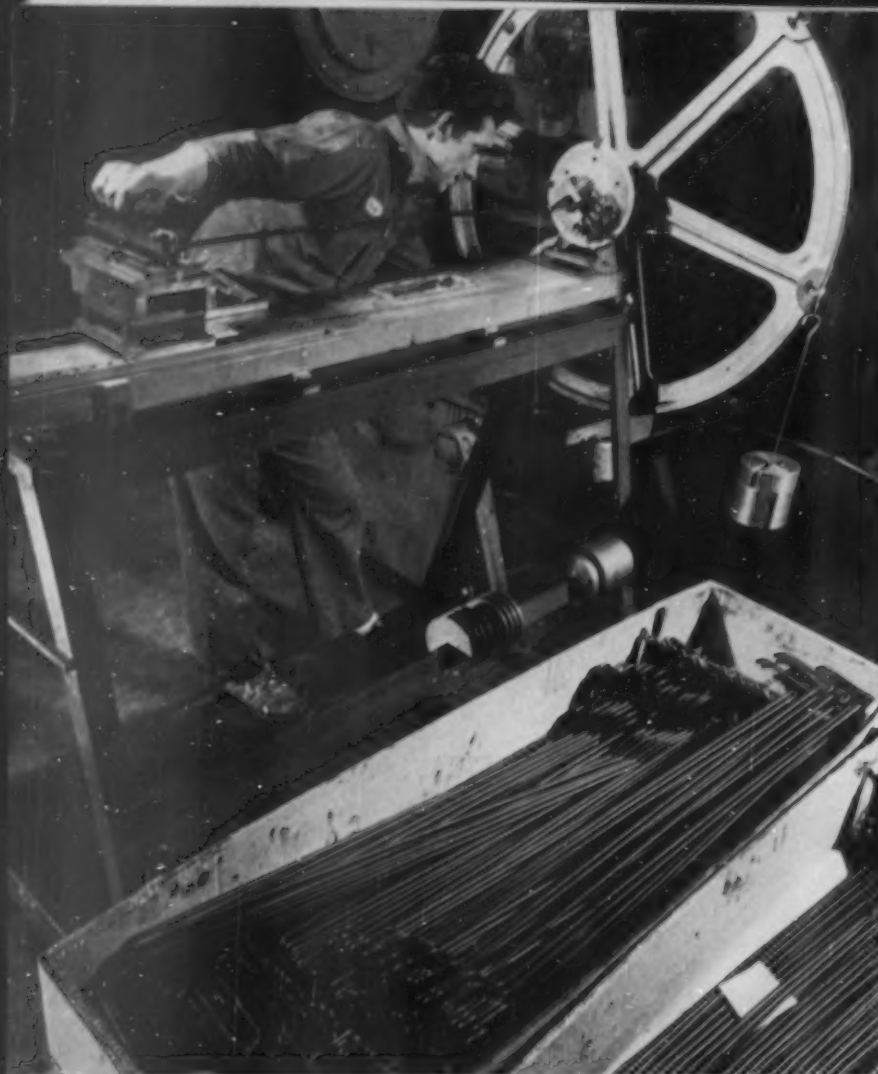
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				SYNTHETIC ORGANIC CHEMICALS



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The hottest new development in steel springs these days is the torque bar.

Already in widespread use as the mechanical storehouse of energy that helps lift the lid on your automobile trunk, you can look for it to start showing up in an increasing variety of applications—in machinery, appliances, and elsewhere.

Key element in the success of the

torque bar is its simplicity. Compared to coil springs, it relies less on design and more heavily on the inherent qualities of the steel from which it is made.

The steel quality required is indicated by the fact that a finished torque bar, 43-inches long and weighing only 1 1/4 pounds, can give your trunk lid an upward flip with a force of nearly

400 inch-pounds. And it can do this year-in and year-out for longer than the useful life of your car.

You can easily see, therefore, how the choice of steel wire for torque bars is an important one. Here's how Precision Spring Corporation of Detroit makes its selection.

The bar for an auto trunk lid is made from .343-inch diameter high

carbon oil tempered spring wire having a tensile strength of approximately 200,000 psi and a yield strength of not less than 150,000 psi. This wire arrives from the mills of expert wire producers such as Pittsburgh Steel Company.

Selected samples are placed in a Tinius-Olsen Super "L" tensile tester. Stress-strain characteristics of the wire—its tensile strength, elastic limit, and yield strength—are electronically charted on a graph.

The correlation of these characteristics shows when the wire begins to take a set. Reduction in area of cross section measured at the break indicates that the wire is not too stiff and brittle for proper forming.

These tests assure Precision Spring that the wire will meet the requirements for torque bars before production starts. Once the wire is in production, Precision counts on consistent uniformity throughout the shipment to provide long trouble-free runs.

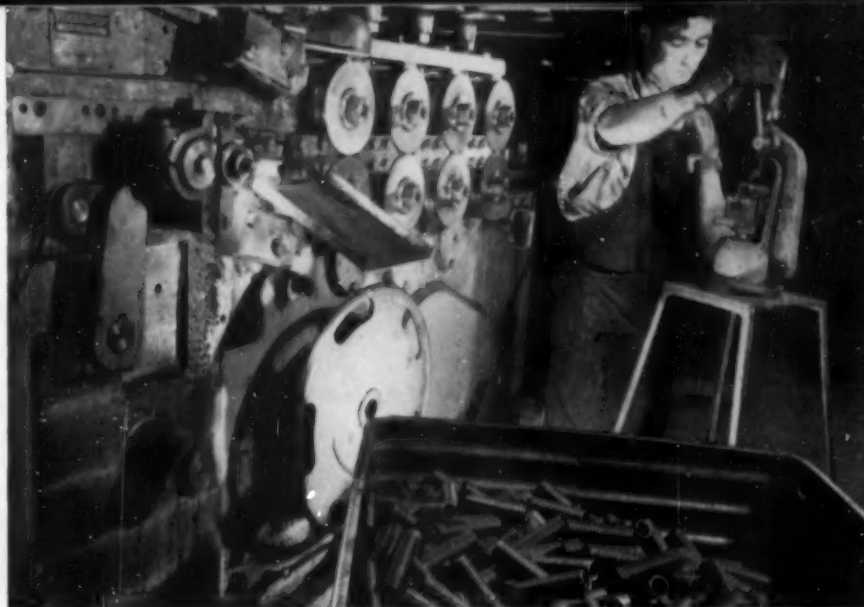
In forming the bar, it is given a total of 11 bends. Five of these are 90 degree bends on a radius less than the diameter of the wire. So you can see that this wire must have formability. At the same time, it must retain its springiness.

Finished bars are tested on special equipment. On this particular torque bar, a maximum torque load of between 720 and 900-inch pounds is suspended from the bar for 24 hours. Then the bar is tested for a working torque load of between 320 and 397-inch pounds to make certain it will not take a set or fail in service.

If every bar were tested, however, costs would be prohibitive. Again, Precision must depend on uniformity in the wire it receives from Pittsburgh Steel. The sample selected must give a true indication of the performance that can be expected for all torque bars produced from the wire shipment.

This reliance on uniformity is not confined to production of torque bars alone. Precision Spring specializes in the tough jobs for automotive and other industrial spring users. It makes compression, extension, and torsion springs in an almost infinite variety of designs and sizes—on high-speed equipment geared to turn them out by the millions.

On any production run, variations in uniformity of the wire within a coil or from coil to coil will cause produc-



Tension springs produced on this Torrington No. 4 automatic coiler, are made from .207-inch diameter oil tempered spring wire. The operator spot checks a spring for proper tension.

tion interruptions. Beyond that, it results in costly inspection procedures to make sure all springs measure up to requirements.

So Precision expects uniformity within the specification range from one end of a coil of wire to the other, and within each shipment of coils. That's what it gets in the spring wire it receives from Pittsburgh Steel Company, as proved by the fact that less than one spring in a million ever fails or breaks in actual field service.

Why not help lower your costs and assure the quality of your wire products by taking advantage of the know-how and modernized wire making facilities at Pittsburgh Steel Company? Its range includes: bright basic wire; low, medium and high carbon wire;

all types of annealed wire; ACSR core wire; cold heading wire; oil tempered and MB hard drawn spring wire; and shaped wire.

This is supplemented by the range of fine wire specialties produced on up-to-date facilities of the subsidiary Johnson Steel & Wire Company, including: aircraft cord wire, armature binding wire, wire for brushes, metal stitching, hose reinforcement, stapling wire, bobby pin wire, tire bead wire, rope wire, oil tempered and MB hard drawn spring wire in smaller sizes, and music spring wire right down to sizes as fine as a human hair.

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BALL BEARINGS



NOTHING ROLLS LIKE A BALL

In Washington

• • •

ODM Resumes Fast Write-Offs But Not for Steel Industry

The inter-agency Defense Mobilization Board has turned down the steel industry's plea for five-year write-offs on proposed plant expansion amounting to more than \$1.1-billion.

Steel producers had applied for additional write-offs on more than 60 new projects, even though the government's expansion goal on steel ingot capacity has been closed for more than a year.

However, the Office of Defense Mobilization has O.K.'d resumption of fast write-offs for some 32 industries. ODM made up its new list after the whole five-year amortization program had been suspended last month. The idea then was to turn off amortization for all except those companies whose products or services are directly used by the military.

Now a dozen or so "defense-related" industries—not directly tied to arms or atomic output—are eligible for the coveted certificates of necessity. Among them: petroleum refining, electric power, glycerin, pipelines, ocean tankers, commercial aircraft.

But there are some restrictions:

- Deadline for new applications for electric power and freight cars is Dec. 31, 1955.

- Amortization will be given petroleum refiners only until another 250,000 bbl. per day is added to capacity.

The hold-down on grants for five-year write-offs is part of the Administration's drive to balance the budget.

• • •

Cities Get Federal Money To Plan for H-Bomb Attacks

Fifteen cities are getting federal grants to plan for survival in case of an H-bomb attack.

At the Administration's request, Congress voted \$10-million last session to help discover what we are up against, to run proposed plans through a test evacuation. Cities in line for grants include Washington, Baltimore, New York, Philadelphia, Chicago, Boston, Cleveland, Detroit, Milwaukee, St. Louis, Houston, Atlanta, Los Angeles, San Francisco-Oakland, and Denver.

Cities will use the money to hire engineers to study population, communications, transportation, traffic control, coordination of public jurisdictions, shelter availability, and like problems.

Test evacuations are expected by next summer. Idea is to show up weaknesses, as in other evacuation tests so far.

• • •

New Security Regulations Warn Contractors on Helpful Data

The ruckus over government censorship of non-secret defense information has been stirred up again (BW-Jul.9'55,p68). Last week, a 23-page industrial security regulation, which was issued originally by the Defense Dept. in January, was made official by



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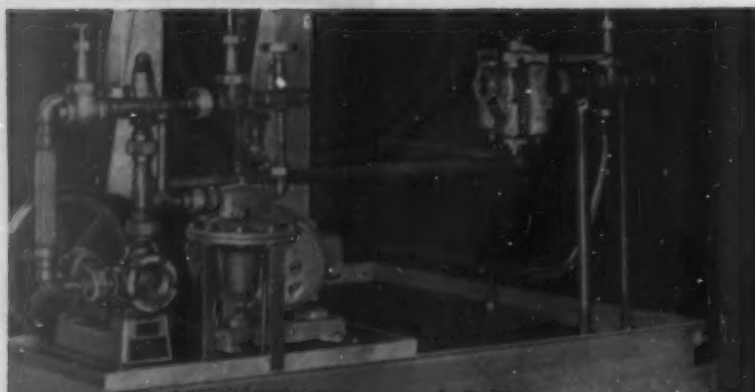
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publication in the Federal Register.

The government warns contractors to use "considerable caution" in releasing news of defense work, specifically so-called "strategic" information. That's data not important enough to be classified but which military officials consider possibly useful to a potential enemy.

Last year, before the regulation was originally issued, the Defense Dept. told contractors that "official representatives of Soviet-bloc missions in the U.S. are active throughout the country in attempting to obtain various types of unclassified information which have military intelligence value."

Among the types of information cited: industrial brochures and catalogs, production charts, blueprints and layouts, technical and research reports, aerial photographs.

The regulation is in line with a previous Pentagon campaign. To Washington newsmen looking for a more liberal policy on dissemination of defense news—on the heels of the Geneva conference, and the general easing of international tensions—the regulation's publication came as a disappointing blow.

• • •

Doubt Salk Vaccine Program Can Meet Christmas Target

The U.S. Public Health Service is registering some doubts about whether all children in the age group most susceptible to polio (ages 5 through 9) can be given Salk vaccine before Christmas.

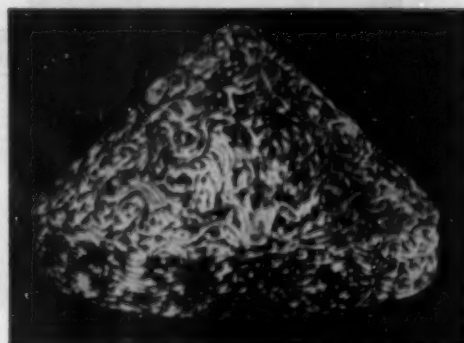
Three of the six vaccine producers—Parke, Davis & Co., Sharp & Dohme Div. of Merck & Co., Inc., and Cutter Laboratories—have yet to get any batches of their vaccine cleared under the higher safety standards that the Public Health Service set in May. The Christmas deadline could hardly be met without some production from these makers.

Public Health last week allocated 2.8-million doses for the vaccination programs of the National Foundation for Infantile Paralysis and of the states and territories. Under the current distribution setup, the Foundation gets first option on all vaccine produced for its program, which covers first- and second-grade students. Remainder is allocated to the



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states on the basis of the number of unvaccinated 5- to 9-year-olds. Each state decides how much of its allocation will go to doctors and how much will be distributed by public agencies.

. . .

Supreme Court Goes On Five-Day Week

The U. S. Supreme Court is going on a five-day work schedule. Since 1898, the nine justices have heard oral arguments five days a week, then met on Saturdays to discuss and decide cases. When the fall term of court opens on Oct. 10, arguments will be scheduled only four days a week, with the conference sessions to be held each Friday.

It promises to be an important session of the court. Among outstanding cases up for decision will be:

- The du Pont-General Motors antitrust case, on appeal by the government, which lost its split-up suit last year. This is probably the biggest, most exciting business case the court will have to handle. The government, in effect, wants the high court to reinstate its charges that du Pont has working control of GM.
- A Communist Party challenge to the 1950 Subversive Control Act. The party has been ordered to disclose its membership and to register as a foreign-dominated organization.
- Several key Taft-Hartley labor issues. Probably the most significant is the issue of when workers have a right to strike.

. . .

Speak Up for Roads, Pres. Eisenhower Urges

Pres. Eisenhower is keeping the heat on for his pet idea—a nationwide network of superhighways.

In a message to the American Automobile Assn. convention in Washington this week, Eisenhower told the delegates to "speak up again and again for prompt [congressional] action." The message is designed to help stir up the public opinion that the Administration hopes will put the idea across. Lobbyists torpedoed new roads legislation in the last session.



Biggest "Crop" of Babies Ever...

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HOW LION FERTILIZERS ARE HELPING SOLVE THE FOOD PROBLEM

In 1954, births in the United States totaled approximately four million—the highest figure ever recorded in the nation for a single year.

America's population is increasing at an astounding rate, but there is a continuing decline in agricultural workers and in the amount of new land which might be used for agricultural purposes. As these trends undoubtedly will continue, the experts foresee the time when assuring an adequate food supply for all will be a grave and compelling problem. Fortunately, they have the answer—the fertility of available farm lands must be increased and maintained through the use of enormous supplies of vital plant foods.

Already, Lion has assumed a leading role in preparing for that future. In the past year, the volume of fertilizer materials produced by Lion was increased by more than 50 per cent when the new Barton Chemical Plant was put "on stream" near New Orleans, augmenting the large-volume production of Lion's giant El Dorado, Arkansas, petro-chemical plant.

Today, with two vast chemical plants operating around-the-clock, Lion is the world's largest manufacturer of prilled ammonium nitrate. The Company also produces sulphate of ammonia, a variety of useful nitrogenous solutions, and anhydrous ammonia—providing farmers a dependable source for the most popular and economical forms of nitrogen fertilizer materials.

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COMMODITIES

The Catch in Oil Import

- Flemming, prodded by independents, coal industry, and senators, demands cutback—or else.
- But it's not that simple. No matter how the limits are applied, somebody will get hurt.
- Even voluntary action might get in trouble.

Last week Defense Mobilizer Arthur S. Flemming issued an ultimatum to 18 oil importing companies: Cut oil imports voluntarily, or face government action to force a cutback (BW-Sep. 17 '55, p. 34). The ODM chief gave importers just one week to come up with a workable voluntary solution.

Independent (non-importing) oil producers are jubilant over Flemming's action. Their own production has been held down by rising imports, and they have been trying for years to get some sort of limit on inflowing oil. When calls for "business statesmanship" failed, they turned to the government for help.

• **Same Ratio**—The first semi-official recognition of their stand came last February, when the President's Cabinet Committee on Energy Supplies and Resources Policy recommended that, in the interest of national security, oil imports should not "significantly" exceed the ratio to domestic production that they held in 1954.

Then, when Congress passed its new foreign trade bill—the Trade Agreements Extension Act of 1955—last June, it incorporated machinery whereby any commodity could appeal for relief if imports were endangering the national security. As soon as the trade bill was passed, the Texas Independent Producers & Royalty Owners Assn.—a group of independents—pointed to the Cabinet committee yardstick for imports, told Flemming that imports already exceeded this standard, and that the new machinery should be put into motion.

There was little doubt that they meant business. Political pressure mounted as 27 senators from oil and coal-producing states demanded that Flemming tell what he was doing to meet his responsibilities. The senators threatened new legislation next year unless imports were cut back.

So Flemming wrote the 18 importing companies on Aug. 5, asking for information on past imports and an outline of their plans through June, 1956. Replies were in Aug. 19; he and his staff have been poring over them since then.

Last week's letter was the result: Flemming said that "unless policy changes take place, the imports for the next several months will continue to be substantially in excess of the Advisory Committee's standard. . . . It appears incapable that in the absence of individual voluntary action by the importing companies, over and above that already taken, the government will have to take action as provided for in the Trade Agreements Extension Act of 1955."

• **How To Do It?**—The trouble is that it's one thing to talk in general terms about cutting imports, quite another to find a workable method—either voluntary or involuntary—for actually doing it. A look at where some of the increase in imports is coming from will show why.

A large part of the gain in crude oil imports this year has been on the West Coast and has come from Canada. The Pacific Northwest produces no oil of its own; until recently, it depended almost entirely on California production. But California fields generally produce a low-gravity crude, which gives a relatively low yield of gasoline and other much-needed light oils; the more desirable high-gravity crude is in short supply. With the completion of the Trans Mountain Pipeline from Canada, two new refineries have gone up in Washington to handle Canadian crude: General Petroleum Co., a subsidiary of Socony Mobil Oil Co. is already on stream; the Shell Oil Co. refinery will start operations soon. Imports from Canada to feed these new refineries have made a bulge in the totals—although there's considerable question whether any U.S. production is being shut down to make room for them.

• **Lumping**—Another difficulty comes in trying to treat imports of many different companies as a total—when it might be grounds for antitrust action if the presidents of these companies were seen talking in the same room. When the Cabinet Committee made its recommendations, most of the major oil importers said they would try to keep their imports within the same

Curbs

ratio to domestic production as they had held in 1954. Most of them seem to be trying to do just that.

The Texas Railroad Commission gathers figures from nearly all crude oil importers on their current imports and plans for the future. These forecasts are now available through the end of the year. Totaling annual figures for the five major oil importers that have large production abroad—Gulf Oil Corp., Socony Mobil Oil Co., Standard Oil Co. of California, Standard Oil Co. (N. J.), and The Texas Co.—you get an increase in crude oil imports over last year of 1% on the East Coast alone, 5% on East and West Coast combined. The increase for all other companies—many of which imported only in a very small way before this year—comes to 40%. These include contractual buyers, as well as smaller U.S. producers now owning foreign oil.

• **Caught in a Vise**—Many of these relatively new importers have been caught in a squeeze. Crude oil prices in this country have stayed pretty much fixed, while marketing of refined products is highly competitive and prices jump around rapidly. So some refiners are turning to foreign oil; some of them have made investments and long-term commitments. The pressure of the lush Middle East reserves is almost irresistible: At least one company has even found it profitable to bring Middle Eastern oil to the Gulf Coast for refining.

And that is precisely what the independent domestic producers are unhappy about.

As matters stand, any "voluntary" effort to coordinate imports would probably stub its toe on the antitrust laws. (At the time of the Cabinet Committee recommendations, Atty. Gen. Herbert Brownell made it clear that this was not to be considered sanction for collusion.) But even if the Administration decided to waive antitrust considerations and allow a meeting, some knotty questions would still have to be answered.

Do you give the same percentage increase in imports to everybody—and so, in effect, put new importers out of business? Or do you force the major importers to cut back and make room for the newcomers? What about companies that aren't importing at all yet, but are definitely scheduled to do so? What about West Coast imports—do you cut back elsewhere to make room for them?

• **Policing**—The same questions would

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have to be answered if the government tried to put in quotas. Also there is the additional headache of trying to police a system and, most of all, coping with the outraged feelings of Venezuela and Middle Eastern countries that would find a ceiling put on their biggest source of income.

The battle over oil imports has produced a numbers game all its own, with the independents—and Flemming—citing one set of figures, the importers another. In his letter, Flemming said that while domestic production increased by 5% through July of this year, crude oil imports increased nearly 15%. True, say the importers—but the Cabinet Committee recommendations were specifically in terms of ratios. Because imports, in actual quantity, are small in relation to production, a fairly large percentage increase in imports will mean only a very small increase in the ratio to production. Figured this way, the ratio of crude imports to domestic production in the first seven months of 1954 was 10.1%; the same ratio this year was 10.9%. These are the figures the importers quote—and ask whether this is a "significant" increase.

• **Residual Oil**—The other big bone of contention—besides crude oil—is residual imports. Residual oil is the low-value product on the refiner's scale—it sells for less than crude oil—and with the improvement in refining techniques over the years, less and less of it is produced per barrel of crude. Oil men aren't much worried about residual imports; they have no wish to downgrade their operations to produce more of it. The big fight here comes from coal producers—who have to compete with residual for sales to industrial users.

As coal men saw their markets go to foreign residual, they made common cause with independent oil men—who welcomed the help—in the push against imports.

Residual imports through July of this year increased 23% over last (in ratio-to-domestic-crude-production terms, last year's figure was 5.4%, this year's, 6.3%). Still there is a tight supply of residual on the East Coast this year, prices have gone up, and coal has recaptured some of its lost markets.

To most observers, actual government restrictions on imports still seem a long way off. Most feel that Flemming's letter, stern though it sounds, is really just another attempt to get the industry to police itself. If that doesn't work, he can go directly to the President with a recommendation for quotas—or he can get involved in lengthy hearings. Even if he finally did recommend quotas, it's an open question whether Pres. Eisenhower would go along. **END**

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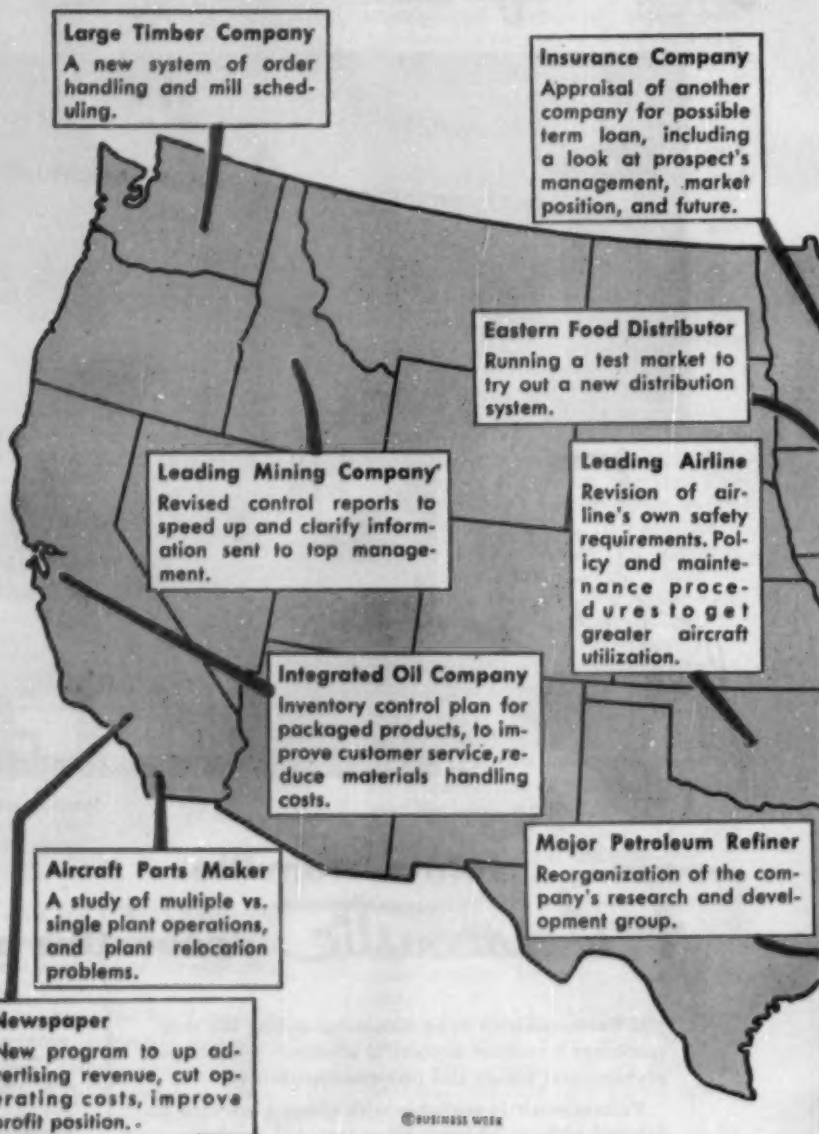
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Slump or Boom, They

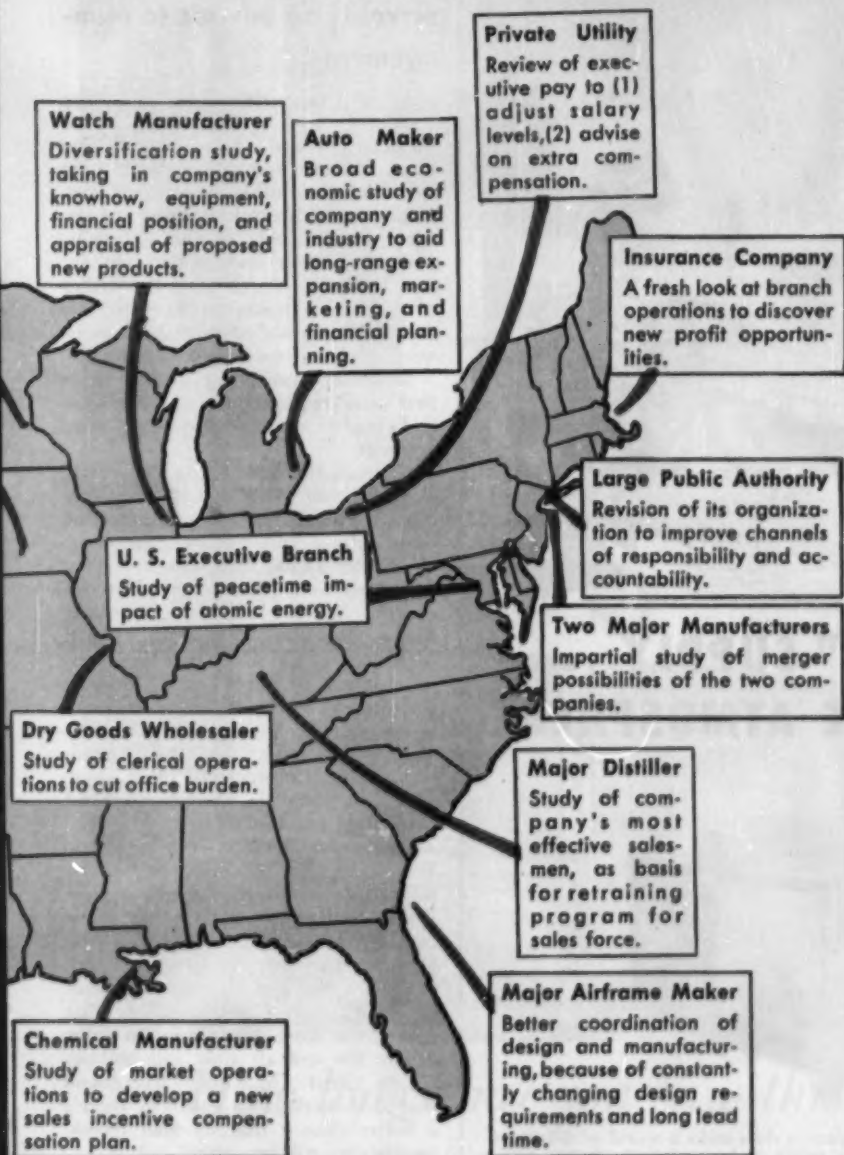
Around the nation, business is good and there are plenty of indications that it's going to stay that way for quite a while. But if you take a look at one of the byproducts of good business, you see that the nation's management men obviously believe business could be even better than it is.

The byproduct is the profession of management counseling. Through recession and boom during the last 15 years, it has had a 100% growth: Where there were around 1,250

management consulting outfits in the U. S. and Canada in 1940, there are at least 2,500 today. You get an idea of the size of the business when you find that the profession's trade association—Assn. of Consulting Management Engineers, Inc.—reckons today's 2,500 outfits have a total income of between \$400-million and \$500-million.

• **On the Doonstep**—And now, as the profession's fast-growing influence shows signs of expanding still more,

consultants were working on projects like this:



ROBERT K. STOLTZ, one of the 80 associates handles general company surveys.



ROBERT S. HALL, a principal, who watches out for management controls.



J. McLAIN STEWART, an associate. His specialty: personnel relations.

Keep on Growing

it's clear that businessmen are going to have to know more about management counseling outfits. Businessmen who have been coughing up for advice from the counselors are likely to be footing more bills from them in the future; businessmen who haven't yet met up with the counselors are likely to be seeing them on the job.

To get a close-up view of how these advisers-to-management go about their business, take a look at the inside workings of one of the top firms in the

business: McKinsey & Co., an outfit that's been counseling management for more than 40 years.

I. A Broad View

It's plain, from the map above showing McKinsey's activities, that the company is busy right now. It has, in fact, been busy almost from the moment it set up shop in 1910. That was when its founder, Jim McKinsey, first began advising management on



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"... the basic idea was to serve as an adviser to management ..."

McKINSEY starts on p. 136

budgetary controls and cost-cutting ideas. At the time he began turning out this advice other pioneers of consulting were also making their first entries. Such people as the Gilbreths, with their time and motion studies, and Frederick W. Taylor, the father of scientific management, with his manufacturing and shop practice ideas, were evolving specialized techniques.

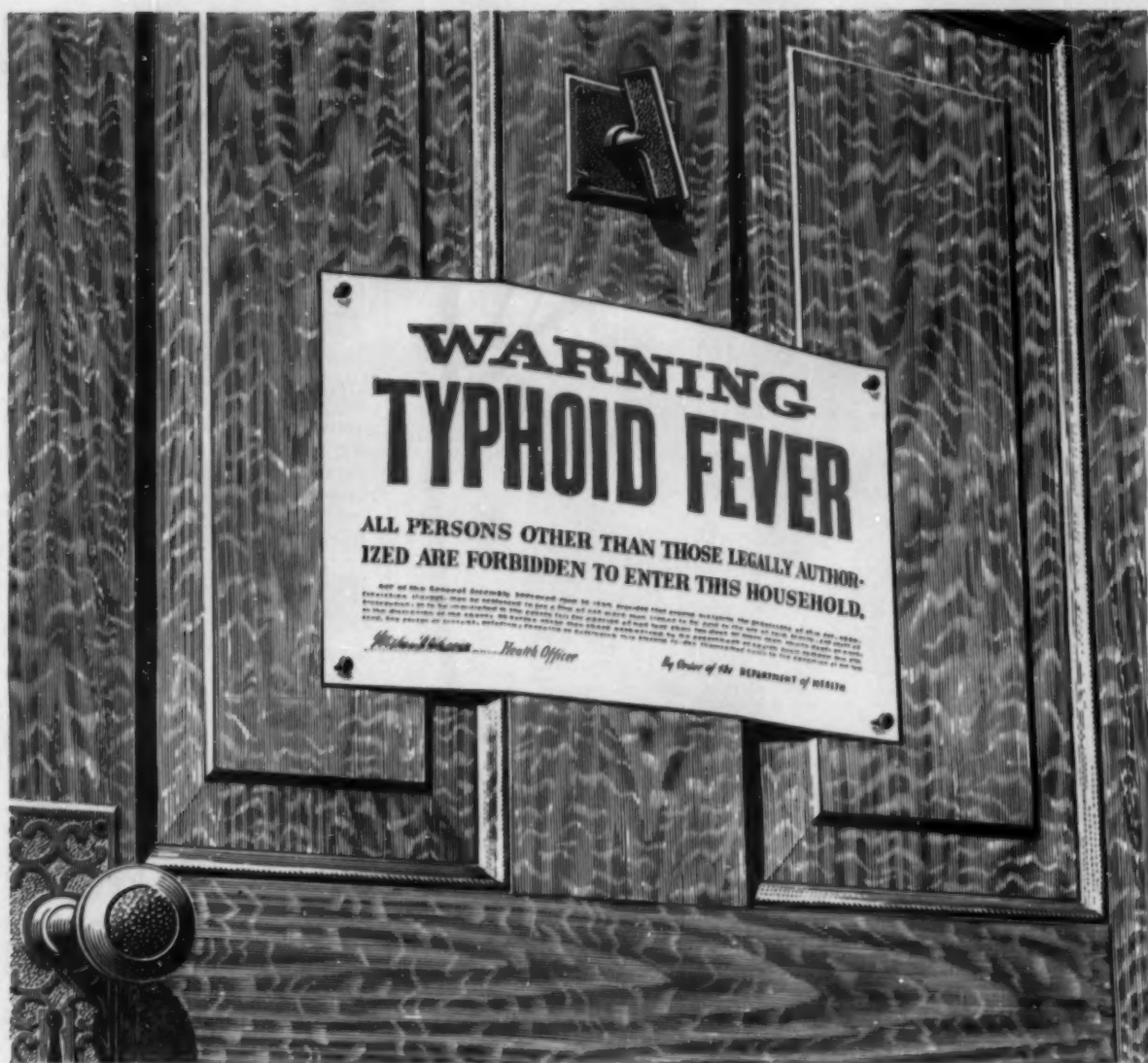
McKinsey was going after a firm that could serve broadly as an adviser and critic on the functions of top management.

Through the years of the post-World War I boom, McKinsey & Co. concentrated on the great fads of the period—cost-cutting and budget controlling. With the 1930s, and business' long agonizing slide, there was plenty of demand for McKinsey's cost-cutting advice. But the times also forced McKinsey to add a batch of new services. Chief of them were corporate organization and marketing. Banks and boards of directors with bankrupt or failing companies on their hands turned to McKinsey, and other counselors, for help in reorganizing and reorienting the companies.

• **Credo for Business**—When World War II came, McKinsey had pretty well laid down the charter under which it now operates—"the top management approach." By this, McKinsey means that it will go to work only with the approval and liaison of its client's chief executive officer; that once it's at work it will want to probe deeply the over-all aims and abilities of its client. McKinsey has found that if it works with the boss there's a better chance that its final recommendations will be carried out.

Some of McKinsey's competitors laugh at the "top management approach." One of them says, "While they're talking to the president, we've moved into the sales promotion manager's office and gotten the order for a new marketing survey." To this, a McKinsey partner says, "That doesn't bother us one bit. We decided long ago that in our consulting we would take into account more than just one piece of the picture. And we haven't suffered for it."

To cover the broad range of management functions, McKinsey is now set up to offer advice in five fields: marketing, manufacturing, personnel and industrial relations, management controls (setting up a structure of top-level financial control), and general surveys



How long since you saw this sign?

Once, typhoid fever was an ever-recurring scourge. But the doctors got to work . . . first, on a cure; then, on prevention.

Prevention, they found, involved more than medicine . . . more than serums and antitoxins. It called for a revolution in sanitation. It called for the engineer.

And the engineer came through . . . with ways to end stream pollution . . . with new and better sewage systems . . . scientific refuse and garbage disposal plants . . .

treatment and control of industrial wastes.

So the typhoid signs disappeared. Simultaneously, old-time swimming holes and recreation spots were revived. Trout fishing came back to areas where it had long been impossible. Cities were able to attract new industries and continue to grow. The farmer got a new source of organic fertilizers to help him grow more and better crops. And the worry lines were erased from the foreheads of millions of perennially terrorized parents.

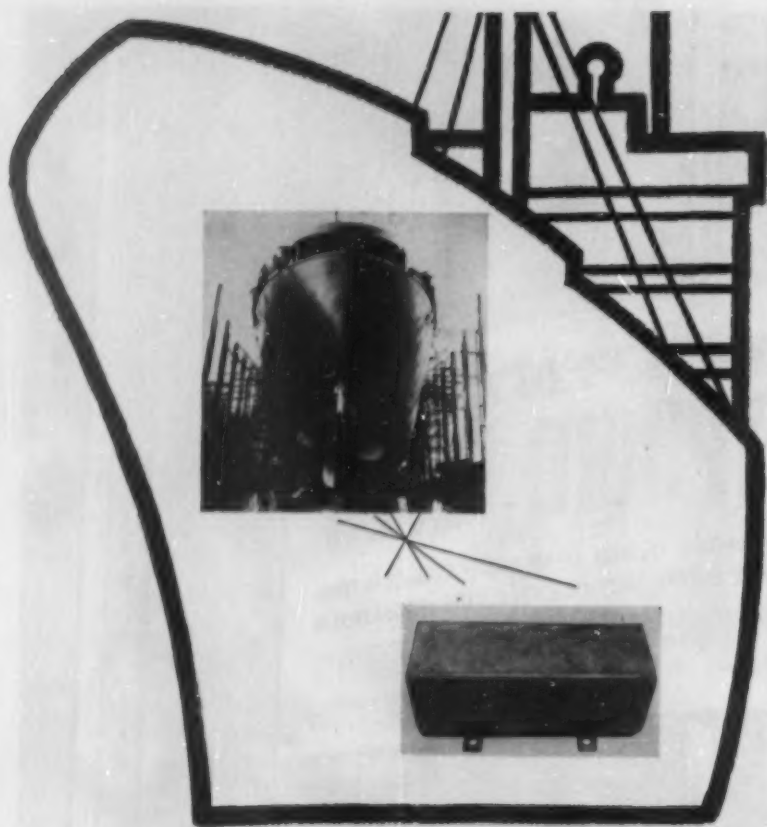


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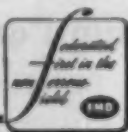
Federated's Corrosion Advisory Service, available to shipbuilders and ship owners who wish to install protective zinc or magnesium anode systems, is typical of the research, development and service facilities by which Federated guides users to most effective use of non-ferrous metals.

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"... McKinsey knows what to look for in picking its young men ..."

McKINSEY starts on p. 136

(studying a client's entire operations).

- **Doing the Job**—To handle its business in these fields, McKinsey keeps a staff of 103 men. Fourteen are the firm's partners, nine are principals, men who through 10 or 12 years have shown unusual promise and who are likely candidates to become partners when there's an opening. The remaining 80 are associates, the firm's rank-and-file. Among the associates you find the specialists, but since McKinsey constantly trains its men to broader and broader management knowledge you do not find specialists in the higher levels.

II. The Pattern of Success

Over the years, McKinsey's top men have learned what to look for when they're out to pick a new man for their staff. Managing partner Marvin Bower has a list of four basic characteristics common to the most productive consultants on his staff.

- **An analytical bent of mind.** McKinsey looks for this in the psychological tests it gives to applicants. Most of those already on the staff say they prefer a "thinking" job to one that demands action.

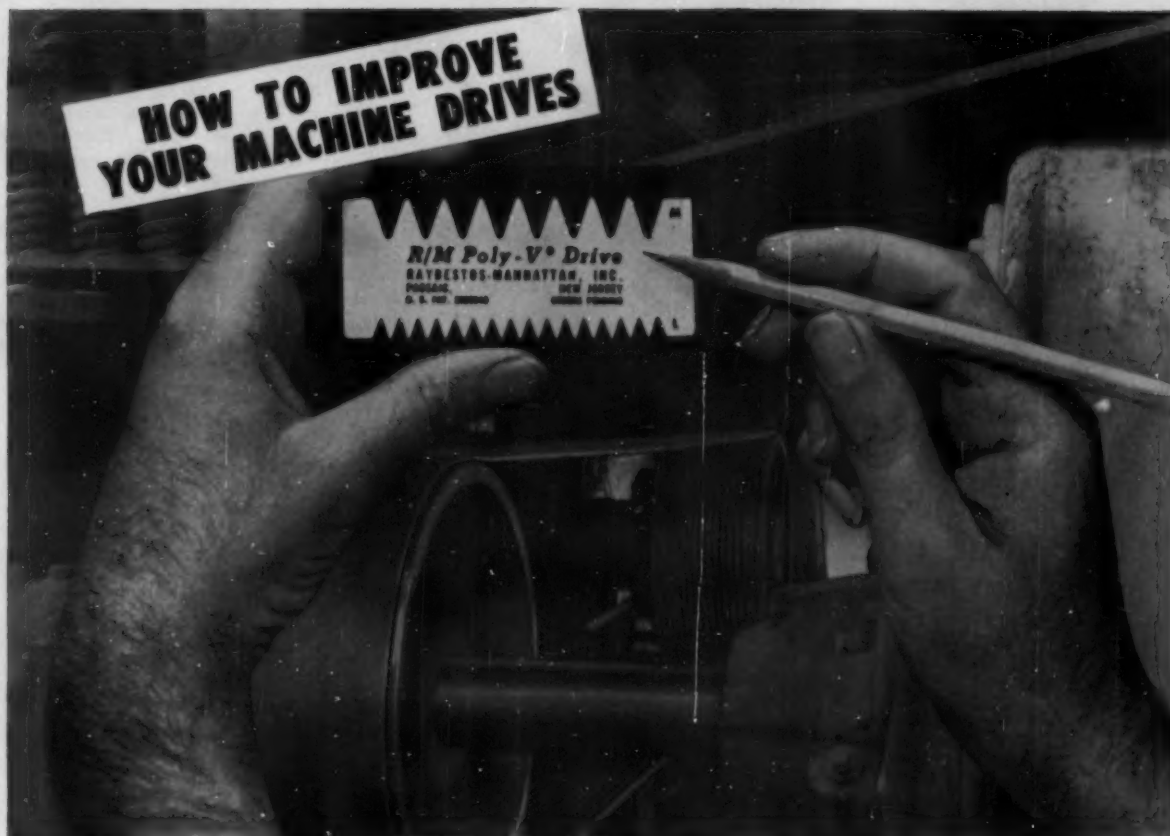
- **A vivid imagination.** Bower says this is vital because consultants must be able to produce a great volume of ideas in a short time.

- **First-class judgment.** Stressing this, Bower explains, "Management is a social science and therefore it's inexact. So good judgment is a basic necessity—we sell judgment as a product."

- **Ability to work well with people.** This requirement is easy enough to understand, since consultants (1) often meet a suspicious, even hostile, attitude in plants, (2) must get most of their data from interviews, and (3) must be persuasive if they're to see their recommendations accepted and carried out.

- **Magnet of Cash**—To get and hold men of the caliber it requires, McKinsey has this policy: "We pay them more than they would get in comparable jobs in industry—not just to attract them, but so that they can meet our clients as equals." McKinsey's actual payroll figures remain a matter for speculation for outsiders. A fair estimate, however, puts a McKinsey associate's income at between \$15,000 and \$20,000. For a principal, it's between \$25,000 and \$40,000. And for

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GREATER DRIVE CAPACITY—no other belt drive delivers as much power in the same space as Poly-V!

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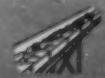
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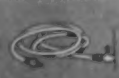
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Due to the unusual deep socket in the above Adjusting Screw it could not be formed from regular annealed and processed cold heading wire.

Keystone's metallurgist recommended Keystone "Special Processed" wire. The manufacturer has now standardized on "Special Processed" wire for this and other difficult cold headed parts. His results have been improved quality, increased production and lower cost per unit.

The superior grain flow characteristics of Keystone "Special Processed" wire provide the necessary upsetting and die forming qualities to withstand the terrific metal displacement in your most difficult cold heading jobs. Your inquiry is welcomed.



the partners, who have their own money in the firm, income estimates range from \$40,000 up to \$200,000 for the highest few in a good year.

The money comes partly from a minimal salary (a drawing account for the partners), and partly from a distribution of profits. What happens is this: All costs are deducted and what remains is split in half. One half goes to the 80 associates; the other half to the nine principals and 14 partners. Each group then sets up a committee whose members wrestle a while with an intricate formula, finally come up with a tally allotting to each man a share of the profit pool that depends on the size and type of contribution he has made to the company through his service to its clients.

• **Hard Drivers**—In the consulting trade McKinsey has been picking up a reputation as a hard place to work. Top brass, the word goes, drives its young men too hard. And the fact that a number of people have quit lately has produced talk about low morale.

McKinsey partners themselves don't take this talk seriously. Says one: "Everybody we have is a hot shot. Sometimes when we get an opening higher up, a guy who thinks it's his turn to move up gets mad when we pass him over. So he quits. If this happens a couple of times, everybody says we're having personnel trouble."

There's no denying that McKinsey is successful. Its clients include: General Foods Corp., General Electric Co., American Airlines, Inc., Corning Glass Works, H. J. Heinz & Co., and a host of others.

• **New Aspect**—The list reflects the new trend of the management counseling business. The trade has moved far toward shucking off the "business doctor" stigma, just as it threw off the "efficiency expert" tag years ago.

What has happened is that booming business has made new troubles for companies. These troubles come from business' growth and complexity. The problems may not be fatal, but they do result in lost opportunities for profit. Moreover, because of the pressure of work, many top executives just can't get to all their problems.

It's at this point that McKinsey & Co. thinks it fits into the picture, handling major, nonrecurring, management problems.

• **Its Own Problems**—McKinsey, like many other firms in the field, claims to be ultra-conservative and says it's upset about the tendency of some late-comers to the field to hard-sell their services. Nevertheless, McKinsey does sell—even if not "hard"—by keeping a public relations firm on the job and maintaining a policy that its members should be "joiners."

Most of McKinsey's business just

Like the submerged $\frac{1}{8}$ of an iceberg, the important part of each SKF bearing is value you cannot see...

- the value of prompt product-design assistance from SKF's field engineers in your area—the most experienced in the industry.

- the value of additional help from SKF home office specialists in your industry.

- the value of unbiased recommendations, possible because SKF makes both ball and roller bearings.

- the value of SKF laboratory research to solve unusual anti-friction problems.

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Product-design men in all industries have discovered the tangible benefits of these "hidden values". They know that satisfactory service life and dependable product performance are often simply the result of the right SKF bearing in the right place.

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OLD EQUIPMENT MAY COST A COMPANY NOTHING—NOTHING BUT ITS FUTURE

Is it hanging over the sales manager?

How big a threat *is* obsolete equipment? Ask the sales manager. His selling price mirrors manufacturing costs. And when that price or product quality isn't in line, he can't win.

Let competition get a little stiff, and super-annuated equipment won't support the selling job. Trying to make do with outmoded production units may seem like smart economy—but lost sales can soon make such equipment the costliest you own.

Before you are faced with such a situation, why not call in qualified equipment builders and find out what you can do now to help avoid it? They are specialists, understand your needs, and will offer your engineers and consultants a wide background of useful knowledge and resources. Careful investigations can show where new capital investment will yield an attractive rate of return and profitable increased sales.



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Lukens backs up qualified builders to help you get economical, efficient equipment. We make it a point to work closely and individually with builders, whether the problem is materials selection or special considerations of fabrication and design. We believe our position as the world's leading producer of specialty steel plate and plate products enables us to make a valuable contribution in this way.

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McKINSEY'S PARTNERS, five of the 14, meet at New York headquarters. Around the table, from left: Horace G. Crockett, Phillip S. Babb, Marvin Bower, Ewing W. Reilly, and E. Everett Smith.

walks in the door. So much of it has been walking in over the last few years that McKinsey has been refusing jobs because of the limits on its manpower. To increase staff is a problem, for the company says it has enough trouble getting the people it wants for normal replacement.

III. On the Job

When McKinsey decides it can handle a new "engagement" it puts the proposed job before a screening committee of partners and principals. They decide whether their firm has the ability to do the job—and whether the job presents sufficient "challenge." If the engagement passes the committee, a partner or principal meets the prospective client, works out the scope of McKinsey's investigation, estimates costs, and suggests how the client's own staff may help.

Then a team gets to work—always under an "engagement director" who is a partner or principal. Sometimes the teams are of only two men; other times, for major jobs, they're likely to be six-man groups.

McKinsey partner Everett Smith explains the steps: "We aim first at a diagnosis. Then we try to develop an individual solution, in terms of the company's net profit results. We tailor our recommendations to each client."

• **Wider Fields**—McKinsey partners are looking for new ventures now. They're trying to settle the problem of where to place branch offices—and how to man them. They're considering Cleveland, Pittsburgh, Detroit, and Atlanta as likely sites. Headquarters is in New York City, and branches are in Washington, Chicago, Los Angeles, and San Francisco.

The Washington office, established

some five years ago, specializes in public administration. It has helped the government in sharpening management operations. One of its early jobs was to figure out which of the many appointive posts in the federal government were the key control spots. Republican leaders worked from this blueprint when filling many government posts in early 1953.

IV. Constant Growth

For the future, McKinsey and most other consultants guess they have a pretty good hedge against troubles. While business is good, they'll proceed as they are now; if a down-turn comes, their services will be in hot demand. Marvin Bower says that as business becomes more complex, management problems increase, and so consultants are needed more than ever. "Good managements now realize that consultants are a major source of help in solving large problems quickly, without using up a chief executive's time."

• **Long View**—McKinsey's people look to the long-term future, too. To help build the future for themselves, the partners three years ago set up the McKinsey Foundation for Management Research. They gave it about \$150,000. Its task: to get scientific answers for some of the questions corporation managers are asking. The foundation, working with Columbia University and a group of top men from business and the professions, has published two books: "What Makes an Executive" and "Management of Expanding Enterprises." A third study—on how to effect changes in large organizations—is under discussion now. And a fourth—on organization and administration of research and development—is contemplated. **END**

In Management

• • •

ACF-Brill Adds Wholesaler To Its New Grocery Chain

ACF-Brill Motors Co., Philadelphia bus maker turned grocer, is moving deeper into the food business (BW—Aug.27'55,p68).

Within three months it has taken on a chain of 31 markets in Oklahoma and the Wrigley and Big Bear chains, totaling 94 markets, in the Detroit area. These acquisitions account for \$250-million in annual sales.

Last week ACF-Brill moved to integrate its Detroit operation by offering to merge with A. A. Wolf, Inc., a privately held wholesale grocery house that racked up sales of \$75-million last year. The merger, which is expected to involve an exchange of stock, is subject to approval by Brill stockholders next month.

Wolf already supplies all the Wrigley's chain's dry grocery volume, which amounts to 47% of Wolf's business (the rest is a weekly catalog service to independents). Addition of Big Bear business will increase Wolf's volume and thus spread overhead costs.

• • •

Insurgents Upset Old Guard At Minneapolis-Moline Co.

The battle for control of Minneapolis-Moline Co., manufacturer of farm machinery (BW—Sep.3'55,p142), has ended with Edward S. Reddig's insurgent stockholder group firmly in the saddle.

Reddig, a vice-president of White Motor Co., becomes chairman of M-M's board. He and his associates control seven of the board's 10 seats.

Warren C. MacFarlane, a principal stockholder and chief adversary of Reddig and his friends, remains as president under the new setup. This is an outward indication, at least, that the old and new management have established some rapport.

The battle began last July when Reddig and others started campaigning for a change in management, to cut the company's losses and to explore possibilities of selling out to a larger company. Now, talk of merger with a bigger concern seems to be muted in favor of talk about new products and possible acquisition of smaller companies.

• • •

Sale of Computers to Business Hits a New Stride, Makers Say

Management's increasing interest in computers has given a new look to recent conferences on the subject.

Two weeks ago, Harvard Business School drew some 130 executives to a two-day conference on electronic

data processing. Last week, the Assn. of Computing Machinery held a three-day conference in Philadelphia on computer applications in business. What used to be a gathering of technicians was this year dominated by businessmen; some 80% of the delegates represented companies that are thinking of using computers.

Next Thursday and Friday, in New York, the Society for the Advancement of Management will hold a conference on Operations Research (BW—Aug.27'55,p64) and the related field of electronic data processors. The 150 conferees attending will be top business executives.

Sales of computers are reported setting a record pace. Remington Rand Div. of Sperry Rand Corp. reports sales orders for \$15.5-million worth of giant UNIVACs in the last 90 days, along with rental contracts for another eight UNIVACs and 50 medium-size computers. International Business Machines Corp., which only rents its computers, says it has orders for 34 large and 170 medium-sized machines.

Buyers are concentrating on the medium-sized computers. Both IBM and Sperry Rand offer these as being best suited to most business applications. Not only are they a good bit less expensive than their big brothers, (a medium-sized IBM 650 model rents for \$3,500 a month, as compared with \$30,000 a month for the IBM 700 series), but for many businesses the medium-sized machines can actually do the job more efficiently. The giants are overly complex for standard business uses.

• • •

Management Briefs

The Railway Express Agency, which has been considering new services and rate reductions, is acting now on buying equipment. It is earmarking \$60-million for materials-handling equipment and new trucks. Plans call for replacement of all 13,500 trucks during the next six years. This alone will cost about \$45-million. Some of the present fleet are old chain-drive models.

Stockholders overwhelmingly approved the merger of Whirlpool Corp. and Seeger Refrigerator Co. (BW—Aug.27'55,p88). The new Whirlpool-Seeger Corp. also takes over RCA's Delaware Appliance Corp. It will market a broad line of appliances under the trade name of RCA-Whirlpool.

Kaiser Aluminum & Chemical Corp. last week bought a government aluminum-extrusion plant at Halethorpe, Md. Kaiser paid \$3.8-million for the plant, which it had been operating under a government lease, in coordination with the Air Force's heavy press program. The plant's annual capacity of 24-million lb. will be nearly doubled—to 46.2-million lb.—in order to meet demand.

Warner & Swasey Co., well-known Cleveland machine tool builder, is negotiating for purchase of Duplex Truck Co. of Lansing, Mich. Apparently, Warner & Swasey wants to integrate in its supply area and to diversify. Duplex supplies the undercarriages of Swasey's Gradall earthmoving and maintenance machines, and also makes engine generator sets and custom-design truck bodies.



Man without a hoe

This cornfield once looked hopelessly over-grown with weeds.

Now the weeds are under control. Yet not a single hoe ever touched the soil.

Give the credit to 2,4-D, an amazing chemical discovery. It destroys only broad-leaved weeds. And gives food plants like corn, wheat, rice, oats and barley a new lease on life!

Unlike older weed killers, 2,4-D is not a poison in the accepted sense. It's practically harmless to humans or animals. But it disrupts the normal growth cycle of broad-leaved weeds. In three or four weeks, they're dead.

What's 2,4-D? Actually, 2,4-dichlorophenoxyacetic acid. And there were tough problems to overcome at

nearly every stage of its development.

Corrosion, for example, was a constant threat to the life of equipment — and to the purity of the final product. So nickel and the nickel alloy, Monel®, are specified for pipes and fittings, steam coils, reactors, centrifuges, dryers, tanks and other equipment used in the making and handling of 2,4-D.

Nickel and Monel protect product purity. And they resist corrosion as few metals do!

If you have a problem in which corrosion, high or low temperatures, stresses, fatigue, or the maintenance of product purity are troublesome factors, let's talk it over. Two minds are always better than one, and we may be able to help you find out how nickel — or one of the more than fifty Inco Nickel Alloys now available — can solve your problem. Write The International Nickel Company, Inc., 67 Wall Street, New York 5, N. Y.

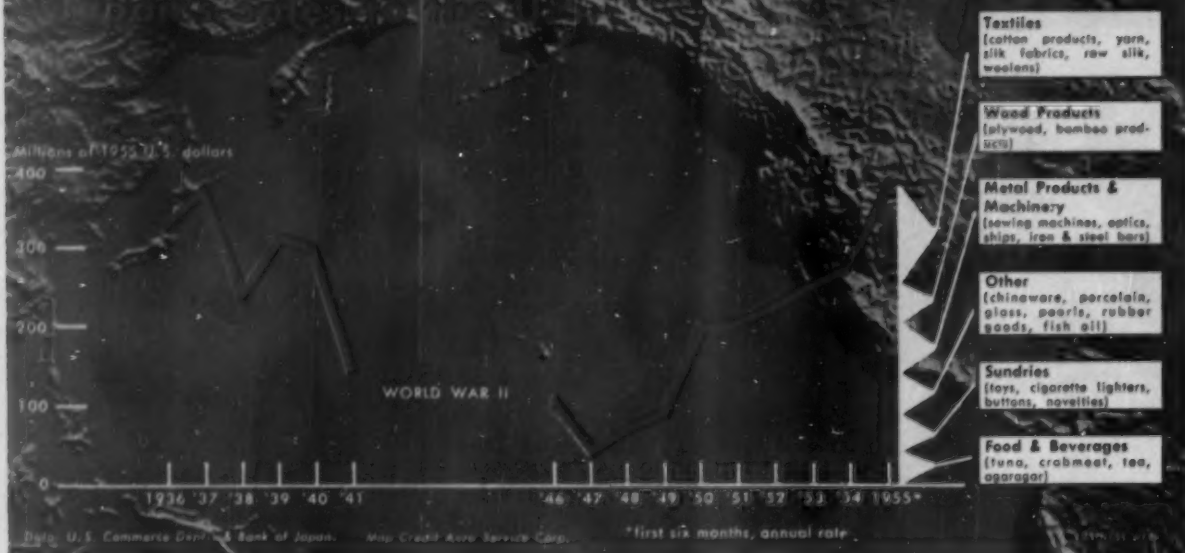


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Nickel Alloys Perform Better Longer

BUSINESS ABROAD



Made-in-Japan: A New Record

Japanese sales to the U.S. are booming. During the first six months of this year they were more than 25% above 1954. The total volume for 1955 will probably top \$380-million, above the prewar record (chart). That's the outlook this week as Japanese exporters and U.S. importers rush to take advantage of the Christmas season—and the new tariff reductions on some Japanese goods that went into effect Sept. 10.

More and more U.S. stores, especially in the East and on the West Coast, are carrying Japanese goods—toys, cameras, chinaware, sewing machines, furniture, ladies' blouses, cashmere sweaters, silks, Christmas ornaments, pearls. Add these items to heavy imports of plywood, tuna, and cotton cloth and you have a real movement into the U.S. market. By next year Japan will be pushing Britain for first place among the industrialized nations selling to the U.S.

• **Filip**—There is no doubt that the new tariff concessions will give an added filip to rising Japanese sales—perhaps boost them by as much as 10% to 20% over the long run. The concessions include substantial tariff cuts on lace, chinaware, some kinds of cotton textiles, and optics, and leave fresh and frozen tuna duty-free.

But Japan would have had a banner year even without these concessions. Japanese traders, sometimes aided by

U.S. importers, have shown a remarkable ability to find a whole new gamut of products for the U.S. market. On top of that they have had official U.S. help in reestablishing Japan's traditional markets in this country. This has been part of our Pacific strategy aimed at hanging on to our principal ally in the area and helping it become economically strong again.

• **Worry**—Some U.S. industries feel that the tariff concessions carry this help beyond reasonable bounds. They recall that in the 1930s some U.S. industries were pushed to the wall by cut-throat Japanese competition based on "starvation" wages and "dumping." Even if these practices are not revived, Japanese success in the U.S. market has already given quite a few businessmen cause for worry.

• **Fever**—In Japan, interest in the U.S. market has reached fever pitch. Fred H. Schoeman, vice-president for the Far East of Metasco, Inc., importing subsidiary of Allied Stores Corp., says hardly a week goes by that a Japanese manufacturer doesn't drop by his New York office asking for advice about tackling the U.S. market. Other importers tell of receiving direct-mail advertising from Japan. And the Japanese government's trade and information center on Fifth Avenue in New York is sparking all kinds of promotional gimmicks (picture, page 150).

• **Payoff**—This enthusiasm for making

a big pitch at the U.S. market is paying off. Metasco, for example, has developed a whole line of modern design dinnerware manufactured from basic Japanese patterns. The quality of the article does not recall cheap Japanese imports of the past. Metasco is using snob-appeal to sell the merchandise, including promotions with Shirley Yamaguchi, Japanese movie star now in U.S. films.

Japan's blossoming postwar optical industry with its 35-mm. cameras, binoculars, and microscopes is another example of new products in the U.S. market. Japan is selling cashmere sweaters, in direct competition with Britain; they have almost become a staple in many West Coast department stores and are seen increasingly in the East. Some scientific instruments of high quality and low price—a voltmeter, for example—are now entering the U.S. market. Most retailers report that the high quality of these new Japanese products is overcoming whatever sales resistance there might have been in the past to Japanese imports.

• **Policy**—The Japanese, in fact, are moving into higher priced goods as a planned policy. And it isn't just a tactic to defeat U.S. protectionist interests. They recognize that merely copying U.S. and European products and selling them for a lower price won't gain the ends of the Japanese export

INDUSTRY'S POWER

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most of everything
you want or need**



NEMA standards set size and mounting dimensions for motors but detailed examination reveals important differences. These differences may result in substantial savings to you on maintenance, expensive downtime and long-range operating costs:

- **WEIGHT OF MATERIALS** — More iron, more copper in a motor provide margins of advantage in strength, rigidity and electrical characteristics.
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- **COOLING** — Fan-cooled motors of ribbed design (illustrated) have 40% more radiating surface than ribless frames to dispel the motor heat that can fry insulation, cut operating life.

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GIMMICKS, such as Japanese rug-making at Macy's, help boost Japan's sales in U.S.

program. Japan must put as much labor as possible into the exports it makes from raw material imports. The Japanese feel that's the only way their industry can support the country's growing population.

Most U.S. importers agree with this policy. "The only way we can help ourselves and the Japanese is to raise the level of the quality of Japanese imports into this country," Schoeman of Metasco says. He also acknowledges that higher quality and prices for an imported article mean larger profits for the importer. Schoeman believes a whole new group of Japanese products, based on Japan's great artistic traditions, can change U.S. homes as much as the Scandinavian-modern designs did in the 1930s and the 1940s.

• **Blowups**—But not all U.S. importers are willing to go along with this appeal to higher quality and higher priced merchandise. That's why there have been several powerful, if little publicized, blowups in Japanese imports during the last few months.

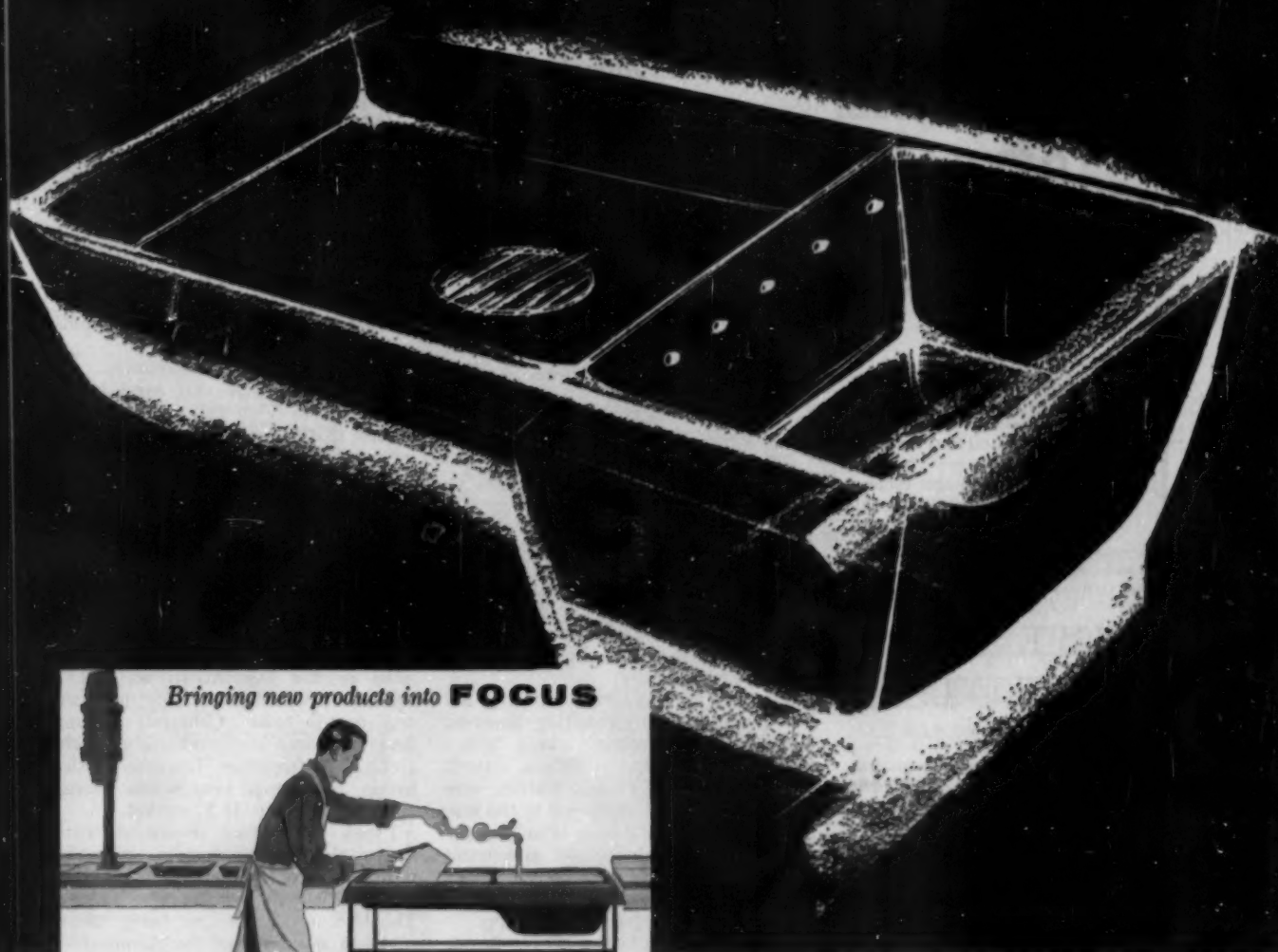
One of them is still being threshed out: the case of the bamboo china. This product was produced in Japan by a couple of small mills for distribution through food chains in the U.S. It consisted of five-piece dinnerware settings, of relatively poor quality but attractive appearance, sold at \$1.50, or with other merchandise for as low as

98¢. These sales so enraged U.S. domestic chinaware producers that protests were made to Japan and Washington through trade associations here.

At the moment, all exports of the bambooware to the U.S. have been halted by the Japanese government. A semi-official trade mission is arriving later this month to try to work out a settlement in Washington. A further complication is the U.S. government suggestion that Tokyo may be violating its trade treaties with Washington by export ban on the article to the U.S. alone.

• **Price Floor**—In cotton textiles, the Japanese are trying a similar policing system. The Japanese Cotton, Yarn, & Cloth Export Assn. late last month provisionally decided to curtail all exports to the U.S. and Canada, and made plans to set up minimum quality standards for U.S. shipments.

A part of this story is the "notorious dollar blouse," as one Japanese consular official in New York calls it. Two Japanese companies, after three years of study in the U.S. market, began turning out a blouse that could be sold here for \$1 or even for 89¢. So far more than 1-million have been ordered in Japan. Now the Japanese government has moved in and put a floor under blouse prices. Last year a similar situation occurred with sewing



Could millions of photography fans make a market for a portable dark room sink?

LOW-COST PRODUCTION OF SUCH AN ITEM IS PRACTICAL WITH REINFORCED PLASTICS!

The need for a dark room sink is keenly felt by millions of men and women whose hobby is photography. They now lack proper facilities for doing their own printing and developing.

Their problem could be solved by a portable unit which sets up quickly in basement, kitchen or bathroom—and stores out of sight in a closet.

The ideal material for such a sink is at hand. By using fibrous glass, bonded with polyester resins, the sink could be molded in one piece. Its weight would be negligible. Its strength would be great. And its cost could be low.

Rounded corners would assure easy, thorough cleaning. There would be no worries about corrosive chemicals

damaging the sink—no rust to contaminate prints.

The use of reinforced plastic materials grows every year. They are already widely applied to sports car bodies, boats, corrugated building panels, modern furniture.

Monsanto supplies the basic ingredients for polyester resins. These include Monsanto *styrene monomer* and *phthalic* and *maleic anhydrides*.

If you would like a glimpse of other possible new uses for reinforced plastics, you are invited to request "A Sketchbook of Profitable Products." Write on your letterhead to Monsanto Chemical Company, Plastics Division, Dept. B-24, Springfield 2, Mass.



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"... Japanese imports from the U. S. last year were about three times Japan's sales here ..."

JAPANESE IMPORTS starts on p. 148

machine heads (BW—Oct. 2 '54, p. 156).

• **Reactions**—The present Japanese government has been quick, in most cases, to act in response to American industries' demands. It knows that sharp tactics by Japanese traders could undermine the whole U.S.-Japanese alliance.

So far, by working with U. S. importers and trade associations, this policing has been successful. It remains to be seen whether it will be equally effective as the volume of Japanese imports rises. If it is not, outcries from U. S. industry and protectionist forces in Congress are likely to bring quotas on Japanese imports.

The reduction of some tariffs this year has sharpened the demands of some U. S. manufacturing firms for such quotas. Thomas N. Ingram, head of the Charlotte (N. C.) branch of the American Cotton Manufacturers Institute, asserts that quotas will be necessary in his industry.

But the cotton textile problem is not simply one of undercutting domestic production by Japanese cheap labor—receiving sometimes as little as a tenth of U. S. wages. Japan's textiles were almost completely destroyed by the war. Facilities have now been rebuilt in the most modern fashion, and as a result productivity is up 15% to 20%. That's why, in spite of substantial wage increases, Japanese textiles are cheap.

• **Fears**—This agitation by the textile industry has been intensified by the tariff concessions. There's a feeling that the concessions will make the greatest difference in the U. S. textile industry.

The sharpest tariff cut in cotton fabrics is in damask, which has been cut to 17.5% for all grades. Formerly the tariff was as much as 30% for some kinds of the cloth.

• **Other Cuts**—Other important tariff concessions were made on chinaware—again involving an American industry in difficult straits. Japan has supplied the principal part of the cheap chinaware market in this country since the early 1930s. That's in spite of the fact that Japanese imports have carried an ad valorem duty plus a 10¢-a-doz. levy to prevent cheap Japanese goods from undercutting the whole market. The new tariff drops the duty from 10¢-a-doz. plus 70% ad valorem to 10¢-a-doz. plus 45% ad valorem. On slightly more expensive chinaware, the reduction is from 70% to 60%. U. S. negotiators point out that of the types of chinaware affected by these tariffs reductions, only half are made in the U. S.

Toys, one of Japan's traditional ex-

ports to the U. S., have received a 50% cut. Here, Japanese sources maintain it will be European manufacturers and not domestic producers who will feel the pinch. German toy manufacturers, for example, are known to be studying the Japanese industry with an eye to making the German product more competitive.

Electric light bulbs—mostly for Christmas decorations—received a reduction from 20% to 10%. It is reported that some U. S. manufacturers were primed to take advantage of this drop—with stockpiles of Japanese bulbs waiting in free-port areas to be shipped in. At least one large manufacturer of Christmas tree lights is using Japanese bulbs this year. But at present, the whole strand including the wiring cannot be made in Japan because no underwriters' seal is available there.

One of the most important concessions in the negotiations was U. S. agreement not to put a duty on fresh and frozen tuna. California fishing fleets have been loudly demanding such a tariff. Altogether Japanese fresh, frozen, and canned tuna is now taking about 45% of the U. S. market.

• **Tough Spot**—More important than any of the actual reductions in tariff, most U. S. observers believe, is the psychological effect on Japanese traders. The U. S. concessions are being taken in Japan as proof that the Administration means to back up the pledges to help Japan's comeback in world trade, which it made at last summer's Geneva meetings on the General Agreement on Trade & Tariffs (BW—Jun. 18 '55, p. 160).

Japan's situation is more difficult than prewar, with a population increase of 16.5-million, the loss of 45% of its land area (former colonies and Formosa), and the Communist conquest of China, one of Japan's principal prewar markets and raw materials sources.

Shikichi Minami, director of Daiichi Bussan Kaisha, Ltd., in New York, Japan's largest trading company, puts Japan's argument in a nutshell: "I hope the U. S. public appreciates that we must sell if we are to buy here." Japanese imports from the U. S. were \$725-million last year—about three times Japan's sales in the U. S. Furthermore, Japan bought \$185-million worth of fibers, the largest single customer abroad for American cotton. Minami points out that a relatively small part of that came back as Japanese textiles—only 14% of U. S. consumption. **END**



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Have you examined your communications habits lately? Compare costs, in time *and* money, and chances are you'll choose telegrams every time.

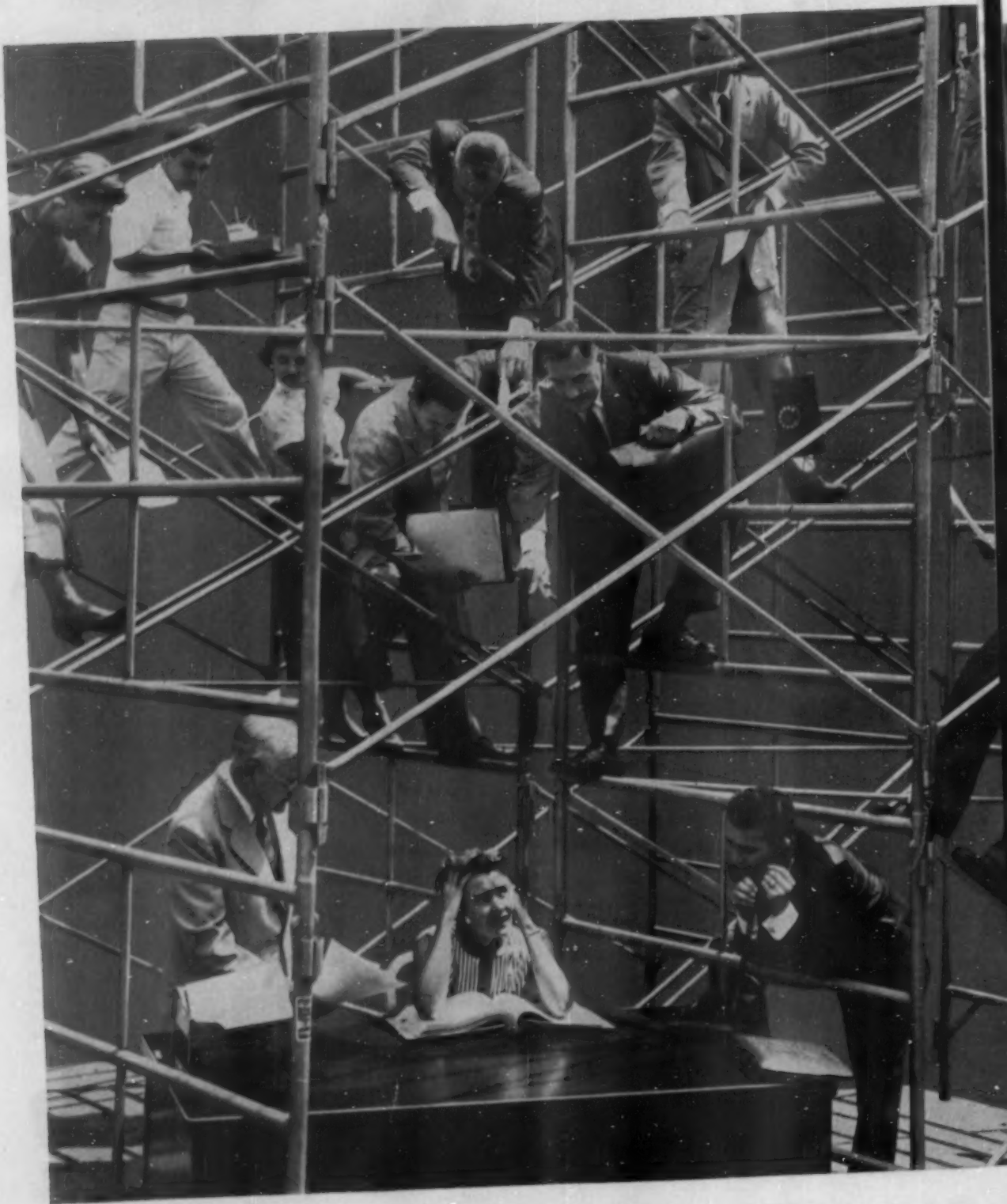
*when it means business
it's wise
to wire*

WESTERN UNION

WESTERN UNION
TELEGRAM

Wouldn't someone like to receive flowers by wire from you . . . today? Easy to send anywhere . . . consult your local florist.

Don't let "Jungle Jangle" sap



your employees' efficiency!

Tests show work output rises as much as 30% with installation of VMP MOBILWALLS

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*Ratio-delay studies accurately rate operating efficiency. Typical studies showing how VMP MOBILWALLS increase productivity are available on request.



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Sulfur Deal Is Cooking

Three U. S.-owned companies in Mexico talk merger secretly. They're a long way from agreement, and hefty difficulties are in the way.

This week three U. S.-owned companies, pioneers of the rich sulfur domes of southern Mexico, are talking secretly about pooling some of their operations—and perhaps one day merging. The result could become a new power among the world's raw material producers.

The Mexican sulfur companies are a long way from getting together. They all have had—and probably will have—trouble in moving toward full production. Yet all three have sulfur, at least 50-million tons of proven reserves. And between them they have already shipped upwards of 200,000 tons.

Indeed, the Mexican sulfur industry—after a somewhat dubious and speculative start—is now in business. A number of other outside companies have caught the scent of brimstone. Mexico City, Houston, New York crawl with rumors about big sulfur producers, chemical and mining outfits, promoters of all sizes and shapes, each supposed to be sniffing around the Isthmus of Tehuantepec where the domes are located.

The latest compliment to Tehuantepec reserves is a report that Texas Gulf Sulphur Co., world's leading producer of sulfur, has finally decided to go ahead on the isthmus.

You can't tell the players in the Mexican sulfur game without a scorecard. Here is one:

Mexican Gulf Sulphur Co., founded in 1946, was the first to get into operation, in March, 1954. Its \$5.5-million plant was the first Frasch process mine ever to operate outside the U.S. In March, 1955, Mexican Gulf made the first export of Mexican sulfur—to a British buyer. The company is said to be having some technical growing-pains—and production is lagging.

Pan American Sulphur Co. got into production a year ago, and is the larger, and perhaps more efficient producer so far. Pan Am claims to have produced 225,000 tons so far this year, and expects to have shipped 175,000 tons before the year is out. Reserves are around 30-million tons.

Gulf Sulphur Corp.'s \$2.7-million plant is nearly finished; full production should be under way early in 1956. Gulf claims reserves of 14-million to 16-million tons, and is said to have the richest sulfur so far found in Mexico.

Texas Gulf Sulphur Co. isn't talking much, but has been quietly exploring a concession. This week, Texas Gulf would neither confirm nor deny reports

that it planned to set up an operation.

A newcomer called Azufres de Mexico has a concession, but hasn't begun work. Ostensibly 100% Mexican, Azufres is rumored to be hooked up with some Houston businessmen. Texas International Sulphur Co., another comelately from Houston, has been mired in legal difficulty.

In addition to these, rumors—many false—have linked Freeport Sulphur, Olin Mathieson Chemical Co., National Lead, International Nickel with possible deals with the Mexican sulfur industry.

For the three—Gulf, Mexican Gulf, and Pan American—that are thinking of cooperation, a merger might make sense. If, instead of duplicating facilities and competing with each other, they set up joint sales forces and other pooled operations they would be in a stronger position to convince world customers to buy Mexican, and buck

the competition of Texas Gulf and Freeport.

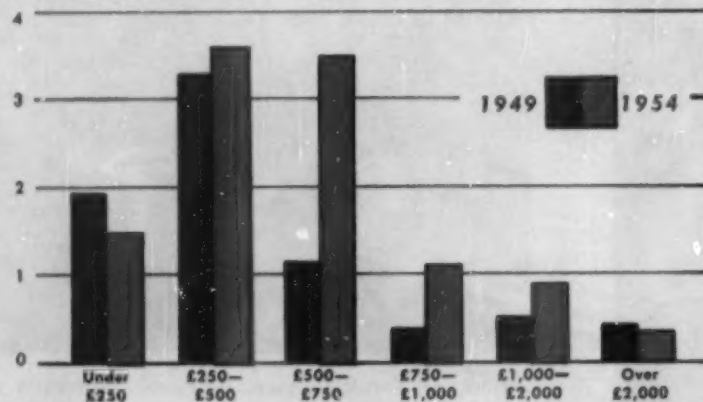
The three are already kissing cousins. The Brady interests of Houston got the Mexican sulfur industry going and through their American Sulphur Co. own 10% of Pan American, 58% of Gulf, and 15% of Mexican Gulf. But putting the three together may be a difficult and time-consuming jigsaw. Each has different financing arrangements, different personnel; and in the words of one New Yorker, "there is a lot of different stock flapping around."

There are some other caveats in the Mexican sulfur scene. Sulfur domes are notoriously treacherous—and geological problems could make mining uneconomic. Marketing is not easy in a world where Texas Gulf and Freeport, both expanding vigorously, have longstanding customer relationships. And, finally, there is the possibility that a highly nationalistic Mexican government might want to modify drastically agreements with foreign producers.

That chance is remote, given the present Mexican government's hospitality to foreign investment. If, in the end, the three get together, the offspring could rank with the world's foremost producers.

Buying Power in Britain

Billions of £ (total after tax income in each range)



Data: The Economist.

©BUSINESS WEEK

Putting the Drive in Britain's Boom

This chart shows simply, and dramatically, the growth of a new mass market—an "upper middle working class"—in Britain (BW-Jan. 29 '55, p108). In 1949 only 2-million Britons enjoyed incomes in the £500 to £750 bracket, and they commanded a relatively small part of the national income. Last year, some 5.8-million taxpayers fell into that category, with £3.5-billion at their disposal. These

Britons have been in a buying mood, running up installment credit for consumer goods and, indirectly, they have contributed to Britain's present inflationary embarrassment. Embarrassment or no, it is a sign of strength for the future and, according to the London Economist, "the most important social development, market phenomenon, and political influence in the past five years."

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Here, in the productive six-state area served by the Norfolk and Western, are the basic elements of good plant location.

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Dependable transportation, another essential chemical plant requirement, is provided by the Norfolk and Western Railway — and the territory it serves is laced by a network of power lines from generating installations having a capacity of over 15,000,000 kilowatts — with additional coal-fueled generators under construction or planned.

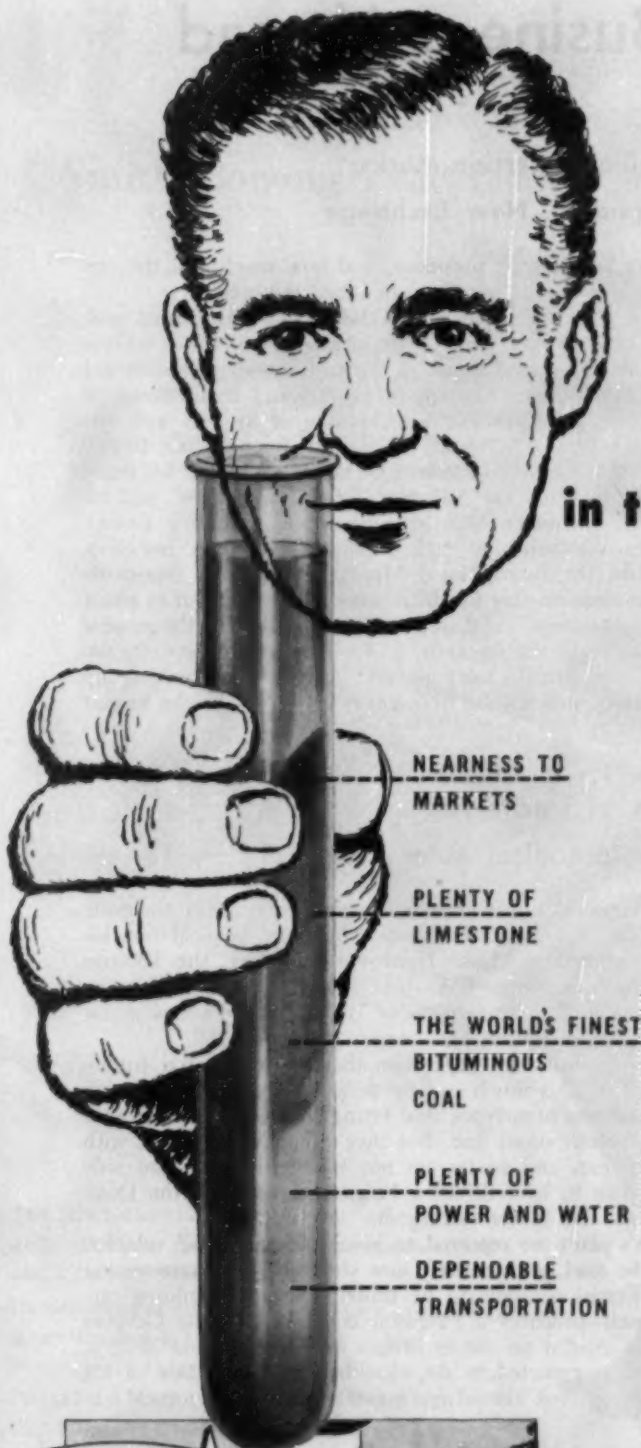
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You will be promptly furnished with factual and engineering data that is necessary for a plant site selection. There's no obligation, and all industrial inquiries are handled confidentially.

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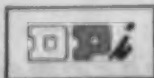




Ever try eating a pound of parsley?

Nature has put more vitamin A in parsley than in any other domesticated vegetable; but even so, the 135,000 units in a pound of it would cost four times as much as the same amount in capsule form at the drugstore. And the chances are excellent that the drug manufacturer would have bought the vitamin A from us.

Firms thinking of using this vitamin in pharmaceutical preparations or processed foods can always count on a proper introduction to the subject from *Distillation Products Industries*, Rochester 3, N. Y.



Distillation Products Industries
is a division of Eastman Kodak Company

In Business Abroad

• • •

Big Brazilian Question Marks:

New President, New Exchange

Who's to be the next president, and how much will the currency be worth, are the big issues in Brazil this week.

There's a trace of apathy about the Oct. 3 presidential poll. Indeed, Brazilians—and many Americans—figure it's a choice between evils. Two men appear in the lead. Juscelino Kubitschek represents socialist-labor elements; the army and businessmen, at home and abroad, don't like him because of his ties with the old Vargas regime. Adhemar de Barros, freewheeling former governor of Sao Paulo, is preferred by business. For all his shady dealings, businessmen say Adhemar "gets things done" and expect him to encourage industrial expansion, including foreign investment. A tossup now—with perhaps an edge for Juscelino.

Meanwhile, the International Monetary Fund has reportedly O.K.'d a devaluation plan for the cruzeiro. It may be cut to about 60 to the dollar—soon. Stiff import taxes will modify the present unwieldy exchange auction system. Some experts believe devaluation will spur Brazil's sales abroad. At any rate, clearing up the uncertainty now stalling Brazilian business will be the biggest benefit.

• • •

Ferguson, of Tractor Fame,

Cooking Up Radical Autos

Harry Ferguson, retired tractor magnate, has been tinkering secretly in his Coventry (England) labs since he sold out his \$14-million interest in Massey-Harris-Ferguson Ltd., the Toronto farm machinery combine (BW-Jul.17'54,p125). Now the inventive Irishman, hardy and energetic at 71, has formed a new motor company—Harry Ferguson Ltd., nominal capital \$280.

Ferguson's security is tighter than that of the Central Intelligence Agency. This much can be deduced: Ferguson is testing a series of vehicle prototypes, and trying to interest British auto makers in a revolutionary line. But they're happy, it appears, with conventional cars and so far are not too interested. The only outsider known to have driven a Ferguson creation is the Duke of Edinburgh. He is not talking.

Ferguson's plans are reported to involve big or small vehicles, on or off the road, with entirely new structural and transmission concepts. Ferguson seems to be thinking now of building one model himself—probably a Ferguson equivalent of the German Volkswagen. And if no one in Britain bites at Ferguson designs, the inventor is expected to do what he did in the case of his famous tractors—look abroad for manufacturing deals.

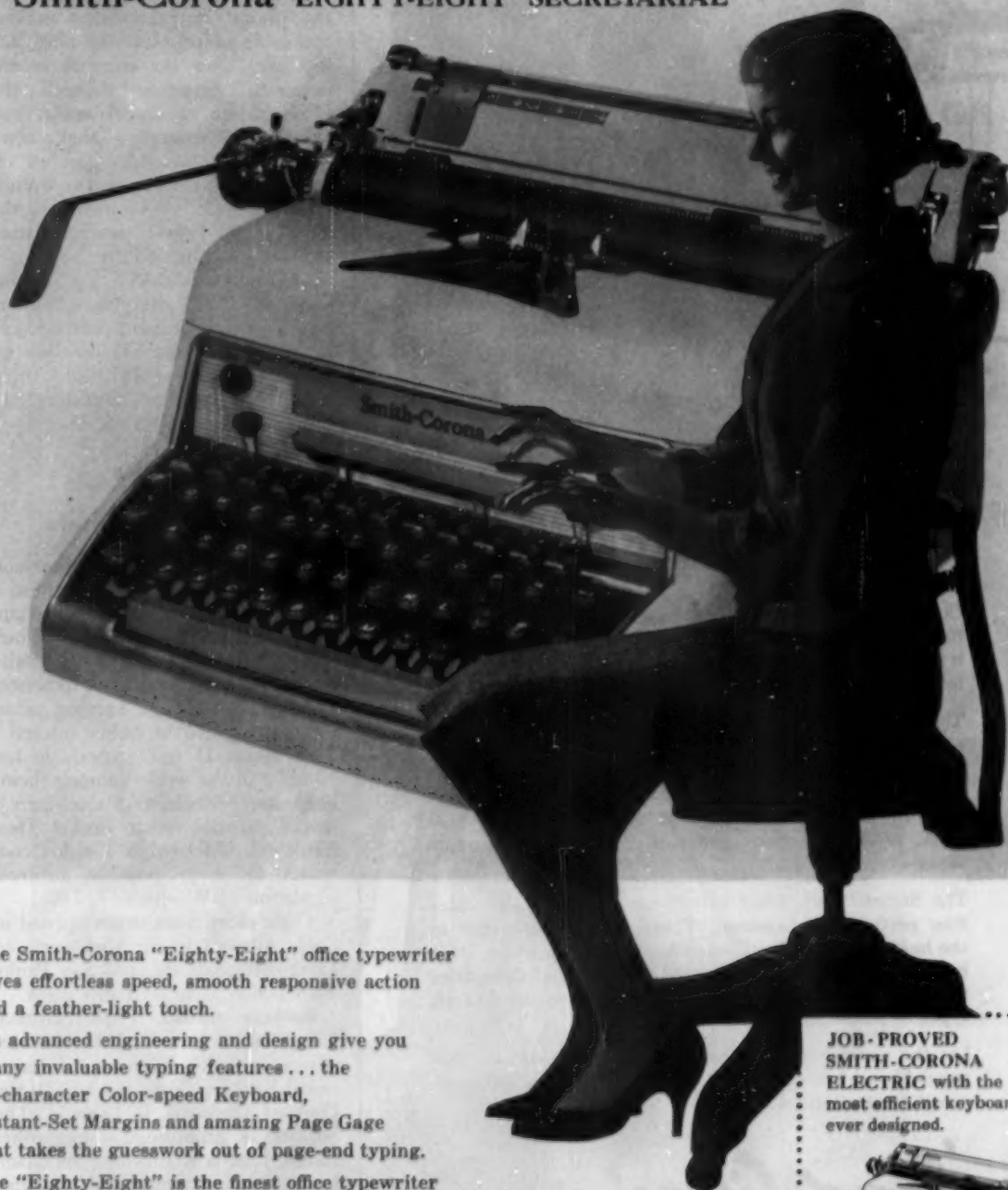
• • •

Worldwide "Yellow Pages"

Hunts U. S. Subscribers

The International Telephone Directory, a sort of global "Yellow Pages," is preparing its 1956 edition in Paris—and looking for U. S. subscribers. It's a brainchild of French businessman

Every essential typing feature
is engineered into the
Smith-Corona "EIGHTY-EIGHT" SECRETARIAL



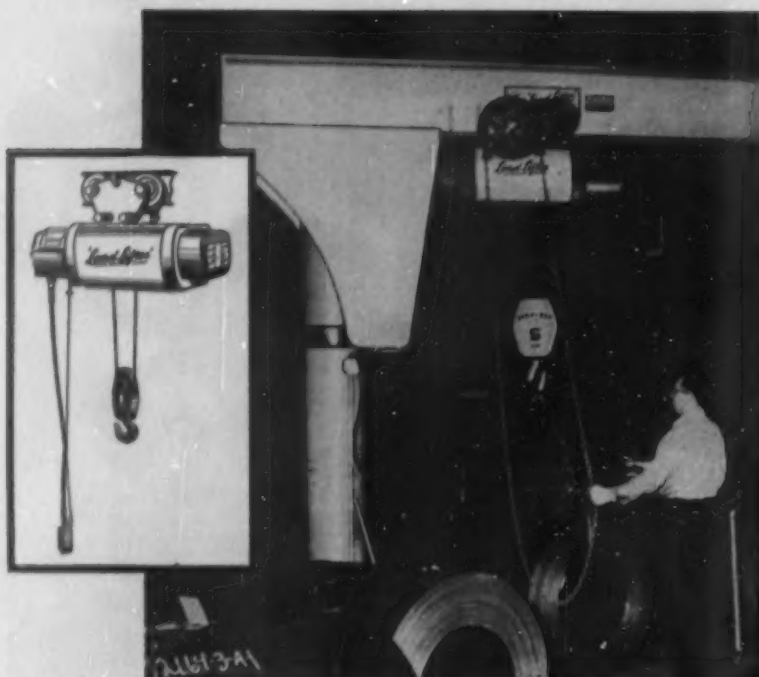
The Smith-Corona "Eighty-Eight" office typewriter gives effortless speed, smooth responsive action and a feather-light touch.

Its advanced engineering and design give you many invaluable typing features... the 88-character Color-speed Keyboard, Instant-Set Margins and amazing Page Gage that takes the guesswork out of page-end typing. The "Eighty-Eight" is the finest office typewriter in our fifty year history. Wherever you find this beautiful Smith-Corona at work you find happy secretaries and satisfied employers. Phone today for a revealing ten minute demonstration.

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SMITH-CORONA
ELECTRIC** with the
most efficient keyboard
ever designed.



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WANT LOWER COSTS? THEN USE THIS HOIST!

Step up load handling speed in your plant and save money doing it. Put the Series "700" 'Load Lifter' Electric Hoist to work. It shortens hoisting time—lifts a 1-ton load a foot in only 2 seconds! You get more lifts per hour.

The Series "700" 'Load Lifter' is a push-button work-saver, safety-engineered to protect man, load and hoist. Only 24 volts at the pendant control! The powerful load and motor brakes are synchronized; each alone can pull the full load. Steel suspension and overcapacity load hook, plus preformed nonrotating wire rope, provide super-strength.

The Series "700" 'Load Lifter' has few parts—trouble-free performance assured! There's extra durability in the heat-treated helical gearing; extra-smooth operation because ball bearings are used throughout. Capacities from ½ ton up. Single and two-speed control and all types of suspension available.

Let the nearby "Shaw-Box" Distributor show how this rugged hoist can cut your load handling costs. Or write direct for Bulletin 410.

'Load Lifter'® ELECTRIC HOISTS

MANNING, MAXWELL & MOORE, INC.
MUSKEGON, MICHIGAN

Builders of "Shaw-Box" and "Load Lifter" Cranes, "Budget" and "Load Lifter" Hoists and other lifting specialties. Makers of "Ashcroft" Gauges, "Hancock" Valves, "Consolidated" Safety and Relief Valves, "American" and "American-Microsen" Industrial Instruments, and Aircraft Products.

Rene-Jean Mollard, who brought out a pioneer world phone book in Europe last year. The upcoming ITD is supposed to list 400,000 companies, in 4,200 categories of business, covering 110 nations and territories.

ITD contains knowhow on using the phone internationally, mailing and cable addresses, postal rates, and the like. But the meat is in the numbers: Browsing through the 1955 edition, a casual reader can learn, for example, that Shell Petroleum's London number is Avenue 4321; or that on the French Caribbean isle of Guadeloupe, the "Tout pour l'Auto" service station answers to Pointe-a-Pitre 0-38.

ITD sells in the U. S. for \$20 pre-publication, \$25 after Jan. 1. Companies doing business abroad can list themselves for \$35—or buy up to a full page ad (\$1,000). International Telephone Directory, 10 East 49th St., New York 17.

• • •

Business Abroad Briefs

Britain's Monopolies Commission has finished another investigation—this one into the supply of certain fabricated forms of copper. Findings: group price agreements, loyalty discounts, other restrictive practices at home and abroad, keeping prices up and "against the public interest." That makes 11 trade reports so far; 10 more in the works (among them: linoleum, electrical machinery); several on the future docket (tea, fertilizer). Meanwhile London continues to study possible antitrust legislation (BW—Jul. 9 '55, p. 110).

Three more Sears stores opened in Latin America in the past week—in Lima, Mexico City, and Sao Paulo. That makes 31 in six Latin lands.

Bankers abroad: First National City Bank of New York has eyes for Africa, and its subsidiary, International Banking Corp., has bought the Bank of Monrovia, in Liberia. The business is promising; among other things, Liberia is a favored tax haven for a growing number of U. S. firms in business abroad, and the Yankee dollar is legal tender. . . . Lehman Bros. and Lazard Freres & Co. are buying a 10% interest in Milan's Banca di Credito Finanziario, a huge Italian business and industrial underwriting organization.

atoms for peace



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ANACONDA®

INTERNATIONAL OUTLOOK

BUSINESS WEEK

SEPT. 24, 1955

A BUSINESS WEEK

SERVICE

The genial mood of the Geneva conference is showing signs of hard wear.

The Kremlin is acting as if it could shape the future of Germany without bothering about the West—and still develop better East-West relations.

If the Russians stick to this game at the upcoming meeting of foreign ministers, that confab won't end in smiles as the summit meeting did. The U. S. regards progress toward German unification, based on free elections, as the real test of Soviet intentions.

From Moscow's latest moves you would never know that the future of Germany was to be at the top of the foreign ministers' agenda.

This week Moscow is masquerading East Germany as a sovereign state. The Kremlin's East German stooges have been given the exclusive right to negotiate with Bonn on unity.

If this is a hard policy decision and not merely a pre-Geneva bargaining maneuver the foreign ministers' conference might even blow up.

Secy. of State Dulles and Foreign Secy. MacMillan won't let this happen if they can help it.

They are now putting the finishing touches on a Western proposal for a European security system. This would provide the Soviet Union with a NATO guarantee against any aggression from a rearmed and reunited Germany.

If Moscow refuses this offer, it will be clear to the world that Soviet talk about needing security against Germany is strictly phoney, that the aim is to maintain the status quo in Central Europe.

Moscow may believe, of course, that it can maintain its present position in Europe and still get the West to agree to a "nuclear peace treaty" and to better trade and cultural relations.

In that case you'll get a stalemate at Geneva on Germany and probably on East-West "contacts." But there might still be some progress in the United Nations toward agreement on the Eisenhower aerial inspection plan. We wouldn't want to be the ones to stall that.

U. S. policy on trade and cultural contacts is getting a pre-Geneva overhauling.

Two high-powered interdepartmental committees—one for the trade and the other for cultural relations—now are at work on the problem. They will report to the National Security Council within the next two weeks.

The East-West trade study is in the hands of a special committee set up by Joseph Dodge's Council on Foreign Economic Policy. State, Commerce, Defense, and Treasury are all represented.

Secy. of State Dulles this week appointed William H. Jackson as his special assistant to head the other interdepartmental study. Jackson is a partner in J. H. Whitney & Co., New York investment firm, and a former deputy chief of the Central Intelligence Agency.

It's too early to predict the outcome of these policy reviews. Conflicting opinions within the Administration still need to be ironed out. The Pentagon

INTERNATIONAL OUTLOOK (Continued)

BUSINESS WEEK

SEPT. 24, 1955

tends to oppose any relaxation on trade or other exchanges with the U.S.S.R. Some officials in State and the White House think the U.S. stands to gain from some relaxation.

The basic policy line is pretty well set. Dulles will hold back on concessions until there is some settlement of the big cold war issues. But he may not give a flat no to Molotov at Geneva if it looks as if we stand to gain by offering to swap concessions.

The two committees are trying, therefore, to decide how far the U.S. can safely go in scrapping present restrictions and what price—in kind—it can ask the Russians to pay for U.S. concessions.

One sort of swap the trade committee is studying is this:

The U.S. might offer to (1) encourage trade in non-strategic goods; (2) restore most-favored-nation tariff treatment to Soviet bloc countries; and (3) examine the sale of U.S. farm surpluses.

In return the U.S. would ask the Russians to (1) give American businessmen free access to Russia; (2) offer assurances that U.S. patents and trademarks would be respected; and (3) agree to joint machinery for adjudication of legal disputes and claims arising from trade.

—•—

Tariff negotiations at Geneva next January may be the most important since the first postwar tariff cutting conference at Geneva in 1947. The products on which the U.S. is considering concessions show why.

The list of some 900 products, released this week, covers imports valued at \$1.8-billion in 1954—17% of total U.S. imports that year and 31% of dutiable imports. That's more commodities, comprising a higher percentage of imports by value, than have been put on the tariff bloc since the first Geneva tariff conference. What's more, negotiations will be carried on simultaneously with at least twenty-five countries—the largest number yet.

The new 15% tariff cutting authority granted the President under this year's extension of the Trade Agreements Act is much less than the 50% authority the U.S. had to use in 1947. But it is probably more, on balance, than the authority available at intervening conferences at Annecy, Torquay, and Geneva.

Politically sensitive items have been pretty well screened out in advance. An effort was made to leave out products wherever there was reason to suspect that tariff cuts would impair national security, injure domestic industry, or conflict with price support programs or with minimum wage laws. Potentially controversial items not listed include the most sensitive textiles, most coal tar products, most earthenware and chinaware, sugars, watches, bikes, many agricultural products.

Another large group of products was excluded because tariffs on them already had been reduced 15% or more during the Japanese tariff negotiations earlier this year.

A few politically controversial products may be up for bargaining, though. They include olive oil, magnesite, decorated bone china, ornamental earthenware, some chocolate products, carpets, sheet glass products.

There's a cumbersome administrative procedure before final decisions can be taken on actual concessions that will be offered.

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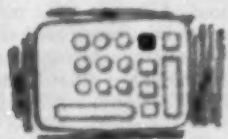
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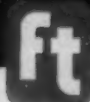
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LABOR

In Politics, Labor Bets on COPE

● Those are the initials of AFL-CIO's new Committee on Political Education.

● Once merger is complete, it will start campaigning with plenty of money and talent.

● Question is, can it effectively meld the conflicting aims of the two parent groups.

Once the American Federation of Labor and the Congress of Industrial Organizations merge this fall, you'll hear a lot about the initials COPE. They stand for the Committee on Political Education—a new, potentially powerful body on which the AFL-CIO will rely in a campaign to restore the Democrats to full power in Washington in 1956.

COPE is due to replace AFL's Labor's League for Political Education and CIO's much-publicized Political Action Committee. As the one political arm for the united federations, it will claim to represent some 15-million union workers. It will be strongly financed and—because George Meany of AFL and Walter Reuther of CIO are personally interested in it—one of the new federation's busiest, and, therefore, most watched agencies.

But will it be effective? That question is being debated in Republican and Democratic offices in Washington, and elsewhere. Merger proponents say it will be; they expect the first tangible result of AFL-CIO amalgamation to be a quick, powerful surge of labor effectiveness in the field of politics. Political realists are skeptical.

The first real test will come in the Presidential race, when the new AFL-CIO will concentrate—through COPE—on defeating the Eisenhower Administration. Although not yet unified, the labor bodies have already begun a coordinated attack on the Administration, its policies, and many of its appointees. The dominant theme of recent Labor Day addresses was political: criticism of the Republicans.

The attack will be broadened and intensified. But, at this point, it is unlikely that the combined AFL-CIO can produce more results next year than they did independently in 1952.

I. Differences of Ideas

Meany and Reuther and other (but by no means all) top leaders of AFL and CIO are in harmony on the role

labor should play in politics. They want no third party, nor, according to Meany, "even a [political] dictatorship by labor or a domination by labor." What they do want, they say, is a solidarity of labor voting, strong support for those committed to the passage of "liberal" legislation.

This is no new objective. The only real difference in 1956 will be that there will be one large federation, not two. There will no longer be two political agencies—the League and PAC—loosely coordinating their work to get out labor votes and direct them toward "friendly" candidates; COPE will be the single union political arm, probably with James McDevitt who has headed LLPE and Jack Kroll of PAC as its joint spokesmen, co-ordinators working respectively with former AFL unions and those merged from CIO.

• **Inherent**—But, despite the best intentions, AFL and CIO political wings may not be merged into one without some problems carrying over into 1956. There have been inherent differences in the two federations through the years, where politics have been concerned. Some are important:

• **AFL and CIO** have had different fund collecting systems. Both have sought through the years to collect \$1 annually from each member, but CIO's individual unions have handled its collections while in AFL the League has undertaken the collection of funds.

• **CIO political chiefs** have operated more or less independently of the governing body of the parent organization, while AFL political leaders have always in the past been guided by the Federation's top-level policy-makers. Because of this, PAC has tended to be outspoken, LLPE conservative.

• **Political activities and goals** of PAC and the League have been different. The former, representing CIO's industrial unions, has been far more interested.

• **On the state level**, AFL and CIO political arms have frequently supported opposing candidates, even in

the current period of close friendship and collaboration. AFL and CIO split widely apart recently in the Kentucky primary for the governorship, won by A. B. (Happy) Chandler, backed by AFL but bitterly opposed by CIO.

These are important differences, but they can in time be reconciled. Not easily, perhaps, because many tradition-minded AFL unions will not quickly agree to the degree of political action advocated by CIO unions—and the latter will strenuously object to any less. Meanwhile, to avoid unsettling rows for the next year, McDevitt and Kroll are expected to serve as co-directors of COPE—the only AFL-CIO agency to be jointly led. The AFL-CIO merger agreement also provides that state and local labor bodies do not have to combine for two years, and it is through these units that the most active labor politicking gets carried on.

II. What Labor Is Doing

It's still too early for talk about individual candidates at union headquarters, but this much is certain: The League and PAC, the bodies from which COPE will be formed, are solidly for the Democrats to a point where they have little contact, and less influence, with the Administration.

Union support for the Democratic ticket will be just as unreserved whether it's headed by Adlai Stevenson or Averell Harriman. But before the Presidential nominee is picked, you'll see labor leaders active in both aspirants' camps. Stevenson has kept his relations good with Reuther and Meany and counts on them to lead his labor supporters. Harriman, on the other hand, may be leaning heavily on Mike Quill, head of CIO's Transport Workers Union.

• **De Sapio Role**—Carmine De Sapio, Tammany Hall boss and the chief engineer of Harriman's Presidential drive, has just taken care of Quill's problems on New York City subways by having his Transit Authority grant TWU a very satisfactory wage increase. Quill has already distinguished himself as the most outspoken critic within CIO of the AFL-CIO merger. He continues in that role and it is figured that he will use his identity as chief dissenter to mobilize as large a group of unions as he can muster against the pro-Stevenson majority bloc. De Sapio counts him an important part of the Harriman drive.

The complete disaffection for the Administration was emphasized in re-

cent Labor Day ceremonies. No Administration official addressed an organized labor gathering, although in other years White House emissaries have usually made such appearances. Labor Secy. James P. Mitchell noted in Washington that he wasn't invited to address any union group this year. Pres. Eisenhower and Mitchell merely made Labor Day statements detailing the workingman's gains in employment and wages to new high levels over the past few years of Republican government.

This is widely interpreted as a clue to White House policy in the coming tug of war for labor's important votes: Administration political efforts will be directed to the workers themselves, by-passing their leaders.

This is a far cry from Eisenhower's first dealings with organized labor, when he chose an AFL official, Martin P. Durkin, as his first Labor Secretary. It was a short-lived and not too successful liaison.

• **Bias Charge**—While the President and Labor Secretary will campaign for workers' support on the basis of the Republican record to date, labor's leaders attack the record as inadequate and largely biased against unions.

Union publications, directed at individual members, are charging (1) that gains by workers in recent years have been won despite the Administration, not because of it; and (2) that although the Administration has backed some labor-sought legislation, notably for revisions in unemployment compensation laws in the states and the increase in the federal minimum wage in Congress, the White House wasn't in labor's camp when a major part of the unions' program was pushed on Capitol Hill.

• **Political Spending**—Furthermore, labor's leaders are placing the blame on the Administration for the indictment of the United Auto Workers (CIO) for political activities in Michigan last year (BW-Jul.23'55,p34). They say that federal charges that UAW spent money to support Democratic candidates in violation of the Corrupt Practices Act would not have been pressed by the Justice Dept. without an O.K. from the White House.

The growing labor attack on the Administration isn't so unusual for this time—a year ahead of the climax of the 1956 Presidential campaign. But political activities on local and precinct levels are running significantly ahead of past schedules, and are directed more at the workers' wives and families.

Unionists point out that one poll showed women "made up 52% of the 1952 Eisenhower vote," from which they conclude that labor undoubtedly lost many women's votes to Republicans even though their husbands may have voted Democratic. **END**



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1955 CONTRACT TERMS:

INDUSTRY	UNION & KEY EMPLOYERS	WAGE TERMS	FRINGE CHANGES	DURATION
Automotive	CIO Auto Workers & Ford, General Motors, Chrysler	6.2¢ improvement-factor raise plus 1.3¢ for wage inequities; added raises for skilled workers; 6¢ raises, 1956 & 1957, and cost-of-living increases	26-week SUP plan costing 5¢ an hour; pension, insurance changes, 7½¢ an hour	3 years
Basic Steel	CIO Steelworkers & U. S. Steel Corp., etc.	11½¢ an hour plus job rate adjustments, average 15¢ an hour	Pension increases	1 year
Coal	United Mine Workers & bituminous mines	\$1.20 a day now, 80¢ a day more next April	More vacation pay; overtime for weekend work	1 year
Electrical Manufacturing	CIO Electrical Workers & General Electric Co.	3% or minimum 4½¢ an hour now and in 1956 and 1957; 5¢ minimum raise in 1958, 1959; c-o-l adjustments	Higher pension with vesting; insurance increases	5 years with re-opening in 1958
	CIO & Radio Corp. of America	5½¢	Additional pension benefits costing 3¢ an hour; other fringes, 2¢	1 year
	United Electrical Workers (Ind.) & Servel, Inc.	3¢ plus 3¢ in November, 1955, and 6¢ in June, 1956	No major changes	2 years
Rubber	CIO Rubber Workers & Firestone Tire & Rubber Co.	12¢ with added raise for some skilled workers	Insurance for retirees; additional paid holiday; other increases totaling 4¢. Earlier, 6¢ in pension-insurance deal	1 year
Glass	CIO Glass Workers & auto and window glass makers	8¢ plus up to 14¢ more for some skilled workers; 5¢ more in 1956 and 1957; c-o-l raise in 1957	Vested SUP plan costing 5¢; pensions and insurance increases	3 years
Steel Fabricating	CIO Steelworkers & can companies	11½¢ hourly raise plus job rate increases; average 13¢	52-week pay supplement plan costing 5¢ an hour; pension increases. Total fringes, 8½¢	2 years
	CIO Steelworkers & Timken Roller Bearing Co.	7½% or from 11½¢ to 30¢ an hour; average 15¢	Pension increases	3 years
Shipbuilding	CIO Marine & Shipbuilding Workers & Bethlehem Steel, Todd Shipyards, Maryland Shipbuilding & Drydock Co.	11½¢; additional raise for some skilled workers for average 15¢ an hour	Pension increases and minor fringe changes	1 year
	AFL Metal Trades & Electric Boat Div. of General Dynamics Corp.	12¢ with wage re-opener	Pension increases, other fringes costing estimated 8½¢	2 years
Auto Parts	CIO Auto Workers & Auto Specialties Mfg. Co., Kelsey-Hayes Wheel Co., Thompson Products, Inc., etc.	2½% or 6¢ plus 8¢ for some skilled workers; 2½% or 6¢ in 1956 and 1957; c-o-l adjustments	Auto-type SUP; pension increases, etc.	3 years
	CIO Auto Workers & Auto Tool & Die Mfrs. Assn.	8¢ to 15¢ in 1955; 6¢ or 7¢ in 1956, 1957	Vested SUP funds, etc.	3 years
Aluminum	CIO, AFL Aluminum Workers & Aluminum Co. of America and Reynolds Aluminum	11½¢ to 18¢ an hour, for average 15¢	Alcoa paid additional 3¢ an hour back to Aug. 1, 1954, in lump sum to CIO workers; AFL already was getting this	1 year
Farm Equipment	CIO Auto Workers & Caterpillar Tractor Co.	8¢ plus 4¢ to 8¢ more for higher skills; 6¢ or 7¢ in 1956 and in 1957; c-o-l adjustments	Auto-type SUP costing 5¢ an hour, plus pension, insurance, and other fringe gains	3 years

There's a Pattern but...

INDUSTRY	UNION & KEY EMPLOYERS	WAGE TERMS	FRINGE CHANGES	DURATION
Farm Equipment	CIO Auto Workers & Allis-Chalmers Mfg. Co.	2½% or minimum 6¢ in 1955, 1956, and 1957, plus additional 3¢ this year only	Increased SUP plan (full 65% of take-home pay, if worker is eligible for it, for up to 26 weeks); pension, insurance, holiday and vacation increases, and union shop	3 years
Oil	CIO Oil, Chemical and Atomic Workers & major refiners	4% with minimum 10¢	Minor fringe changes	1 year
Communications	CIO Communications Workers & Western Electric Co.	7¢ to 12¢, with average 9½¢	No major changes	1 year
Aircraft	CIO Auto Workers and AFL Machinists & major plane manufacturers	4½¢ to 8¢ an hour, varying by company; additional raises for skilled	Upward revisions in pension programs	1 year
Nonferrous	Mine, Mill & Smelter Workers (Ind.) & copper industry	11½¢ to 17½¢ raises, with average 13½¢	Pension increases	1 year
	CIO Steelworkers & Kennecott Copper Corp. and American Smelting & Refining	11½¢ with job rate increases for average 15¢-16¢ an hour	Pension increases	1 year
Trucking	AFL Teamsters & trucking employers through area or city associations	Generally 10¢ to 15¢ in 1955 and totals ranging from 16¢ over two years to 80½¢ in two years in one southern pact; from 31¢ to 50¢ over three years	Varied fringes including in New England a cut in the work week from 48 to 40 hours by 1958, overtime for Saturday driving, and, generally, pension and insurance increases	2 or 3 years
Construction	AFL Building Trades & contractors	Predominantly (over 60%) increases of from 10¢ to 20¢	Few negotiations have dealt with fringes	Varied
Paper	AFL unions & major companies	Generally 4% or 5%, or from 5¢ to 8¢ an hour	Little stress on fringes	Varied
Textile	CIO Textile Workers & American Viscose Corp.	5¢ in 1955; wage re-opening	No major fringe changes	2 years
	AFL Textile Workers & Don River and American Enka	3¢ in 1955; wage re-opening	Improvements in insurance	3 years
	CIO Textile Workers in northern mills	No raise; c-o-l adjustments discontinued	Minor concessions	2 years
Meat Packing	CIO, AFL and independent unions & major companies	14¢ an hour	Only wages were open for bargaining	1 year
Shipping	CIO Maritime Union & Atlantic and Gulf shippers	No wage increase but rates may be reviewed twice on 60-day notice	25¢ a day per man for SUP-type security fund; 25¢ a day more for pension-welfare fund	3 years
Chemicals	CIO Oil, Chemical and Atomic Workers & major employers	8¢ to 14¢; in longer contracts, 6¢ to 8¢ in 1955 and 5¢ in 1956 and 1957	Minor fringes only	1 year or more
	United Mine Workers Dist. 50 & Diamond Alkali Co.	8¢ with 6¢ in 1956 and 1957 and cost-of-living raises	Pension increases, etc.	3 years
	AFL & Dow Chemical Co.	10¢ with wage re-opener	Minor changes	1½ years

CONTRACT TERMS THIS YEAR have now firmed enough to give a clear picture of the 1955 round of wage and fringe increases. First indications that they would be modest proved wrong. The wide range of raises (table) were higher than expected. For instance:

- During the past three months, there were only half as many small and no-raise settlements as before June.

- Raises of from 4¢ to 7¢ an hour, common in the first few months of 1955, dropped off after the United Steelworkers (CIO) won its average 15¢

raise. Since June, pay hikes of 7¢ to 12¢ an hour, or more, predominated.

- As in recent years, settlements do not shape into one pattern for all industry. Instead, patterns have been for a single industry or a large union sprawled over loosely allied industries.



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Big Decision on Welfare Funds

Bakery union is first to issue policy statement declaring money in fund will not be invested in securities of companies under the union's jurisdiction.

Noting the vast financial growth of pension and welfare funds over which unions exercise a joint trusteeship and the increasing amount of the money in these funds being invested in equity stocks, more than one management has pondered this disturbing question: Will the day ever come when the unions will control the companies they deal with by becoming majority stockholders?

• **Unequivocal Answer**—That same question has occurred to the unions. But up until last week, not one of them vouchsafed an unequivocal answer. Now, however, one of AFL's biggest affiliates, the 172,000-member Bakery & Confectionery Workers Union, has gone a long way to quiet employer fears. According to James Cross, B&CWU president and chairman of the Baking Industry National Welfare Fund's joint board of trustees, the fund will put no money in stocks or bonds of companies under contract with the union or within its jurisdiction. The fund, covering 150,000 employees and dependents, has a \$500,000 reserve to invest and is administered by top officers of the union and industry representatives.

Cross said the position was arrived at and formalized by resolution to avoid any "conflict of interest" that might arise. "We do not feel that we want to be prejudiced or influenced by owning stocks in companies coming under the jurisdiction of our union, regardless of whether we are the bargaining agent for the employees or the plant is non-union," he declared. At the same time Cross pointed out that the trustees believe the earning power and future prospects of the baking industry are excellent. For that reason he indicated that other welfare and pension funds would be wise to invest in securities of this industry.

• **Setting a Precedent**—The bakery union official's point of view, expressed so strongly and carrying added weight because it is the first such policy declaration, undoubtedly will have a precedent-setting effect for labor representatives on other funds. It seems safe to say that it will become the prevailing labor philosophy; but this will not mean that all unions will follow suit.

Last winter, for example, at the height of the battle for management control of Montgomery Ward & Co., Inc., James Hoffa, regional vice-president of the Brotherhood of Teamsters, announced Montgomery Ward stock

owned by a welfare fund for which Hoffa was a trustee would be voted for the Sewell Avery slate. Hoffa claimed a quid pro quo as the Avery management agreed to a favorable contract with the Teamsters after a tense period during which a strike was threatened.

Union officials like Hoffa probably will continue such tactics. But to a large extent they can be limited by employer refusal to cooperate. And the likelihood is that such uses of union-controlled funds will be the exception rather than the rule.

Improving SUP

Allis-Chalmers plan is now model for UAW demands. Union still plans to seek new gains elsewhere.

When the United Auto Workers (CIO) signed its first supplementary unemployment pay contract with the Ford Motor Co. in June, it appeared that UAW had got far less than the guaranteed annual wage it had demanded. But UAW seemed well satisfied, saying it had scored a breakthrough that it could exploit.

Since then, UAW has been so successful in building on the original SUP plan that employers who haven't negotiated on SUP yet—or those who have signed for plans patterned after Ford's—should look at developments:

• In Automotive Tool & Die Manufacturers Assn. pacts, UAW established a plan for individual SUP accounts in which workers have at least a partial vested interest. Half of the money that is deposited for them, at 5¢ an hour, is payable to them in a lump sum on permanent severance or retirement. In the flat glass industry, individual accounts are fully vested (BW—Sep. 17 '55, p. 166).

• In the Allis-Chalmers Mfg. Co. contract, which UAW calls a "model" SUP contract, other modifications of the original Ford plan (BW—Sep. 10 '55, p. 168) set bargaining goals that UAW is certain to press for elsewhere.

• **Reopening Ahead?**—UAW's strong interest in what it terms "improved" SUP plans is disquieting for many employers who signed for Ford-type plans. They fear that even before the three-year pacts expire UAW may be back

FALLACIES AND FACTS FOR CARBIDE BUYERS

"Equivalent Grade" charts can mislead carbide users

Another blunt — but necessary — clarification by the manufacturer of Carboloy cemented carbides shows how these charts fail to disclose important facts.

Charts purporting to be "Equivalent Grade" or "Industry Standard" carbide comparison tables are now being liberally distributed in the metalworking industry. Both titles are misnomers.

Those who advocate their use claim or imply that:

1. These charts prove that a purchaser can safely interchange grades made by a number of manufacturers and get equal results on a given job.
2. These charts were compiled as a joint effort by all carbide manufacturers.

Neither statement is entirely factual.

THE FACTS ABOUT CLAIM NO. 1

The so-called "Equivalent Grade" charts are an attempt to convince carbide purchasers that any of the grades listed for a particular job will perform equally well. *This is not in accord with the facts.*

No two carbides are exactly alike in over all performance. Their production abilities vary tremendously because of differences in composition, metallurgical structure, manufacturing techniques, and quality control. For example, Carboloy Grades 883 and 44A have identical chemical composition. Yet because they are completely different structurally, they cannot be used as "equivalents."

Because no two carbides are exactly alike in performance, attempts to force them into arbitrary cubby-holes on the charts lead, inevitably, to poor machining results. The weakness of using the charts to select "equivalent" grades is easily demonstrated by two examples:

1. Carboloy manufactures four different cast-iron cutting grades to handle various conditions. Several other manufacturers have one or two grades to cover the same range. Now it is quite possible that competitive grades might work out in general, but in the specific areas covered by our four grades, they would not provide optimum performance. Yet all the grades are in the same classification on the charts . . . with no attempt made to distinguish their particular advantages.

2. Carboloy's new steelcutting Grades 350 and 370 do not fall under any of the general chart classifications. If included at all, Grade 370, for example, is usually

placed under the designations "C-5" and "C-6." Yet we know from experience that Grade 370 will give far longer tool life than our Grade 78B, which has the same classification numbers. Obviously, the two grades are not in the same category in terms of production ability. Yet the charts would lead purchasers to believe that they are "equivalent."

THE FACTS ABOUT CLAIM NO. 2

Despite anything to the contrary, these charts were not compiled as a joint effort by all carbide manufacturers.

Obviously, every carbide manufacturer should recommend the types of cutting applications each of his grades is designed to handle. This is part of his responsibility to the customer.

However, as far as the Carboloy organization is concerned, our recommendations stop with giving data about our own grades. We have compiled test and case-history information on them. We know exactly how they will perform. But we are not in the position to give similar data on other manufacturers' grades — nor is anyone else better qualified than ourselves to give data on our grades.

But several other carbide manufacturers have decided, apparently, to assume this responsibility. Their compilations — under the title of "Equivalent Grade" or "Industry Standard" charts — are now being widely circulated in the trade. The use of these titles may lead the carbide buyer to believe that the chart has been agreed to by all manufacturers. This emphatically is not the case.

AND, THE GREATEST FALLACY

Unlike steel, which can be changed somewhat by heat-treating or other operations after it is delivered, the properties of carbides cannot be altered.

This means the purchaser should know exactly what he is buying . . . and that he should insist on a carbide with consistent production ability.

The important factor of consistent operation is not covered in any way by the so-called "equivalent charts." And this, we feel, is perhaps the most important fact not brought to the attention of the carbide user who relies on the charts when specifying grades for his job.

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with a demand that SUP plans be "modernized."

You won't get even a tacit admission that this is possible in UAW's Solidarity House in Detroit. Officials there say that they don't believe in reopening contracts except in times of "grave" changes in the economy. They also point out that Ford, General Motors Corp., and other contracts provide that SUP terms cannot be reopened.

However, this isn't enough to still the fears of employers. They are well aware of UAW's "living document" theory of contracts—which provides that a long-term agreement should be open to revisions if unforeseen developments warrant them.

• "Living Document"—John S. Bugas, Ford vice-president for industrial relations, brought this "living document" theory up at the bargaining table when face to face with UAW's president Walter Reuther, leading advocate of the theory.

Bugas made clear that he considers the living-document theory "dishonest if the union insists on its application to the point of a strike or work disruption in anything except extreme changes in the economy—such as exist in a state of war or conditions in which a state of war is imminent." To him, the situation in 1953, when UAW "insisted upon reopening our five-year contract in the middle of its term," was an unwarranted application of the theory.

Bugas asked for—and got—assurances from UAW that the living-document theory wouldn't be invoked to change the SUP contract. According to Bugas, Reuther offered to put it in writing. So, at least in the case of Ford, the management door seems to be slammed tight against any reopening of the original SUP plan to "improvements" negotiated by the union elsewhere.

• **Troublemakers**—Still, as labor-management people study the Allis-Chalmers and flat glass contracts, they wonder how UAW is going to be able to keep its auto company people happy 18 months or two years from now if:

• Changed economic conditions force substantial SUP payments, with UAW's farm equipment workers faring better than its auto workers.

• There are so few beneficiaries of SUP in auto plants that dissatisfaction spreads, because—unlike flat glass workers—auto workers get nothing tangible from the \$4 an hour paid into reserves in their behalf.

• **New Model**—Regardless of whether the new plans lead to an eventual reopening of existing contracts, they have an importance to all who deal with UAW and who haven't signed new contracts yet. According to Nat Weinberg, auto union research director and a principal architect of its guaranteed

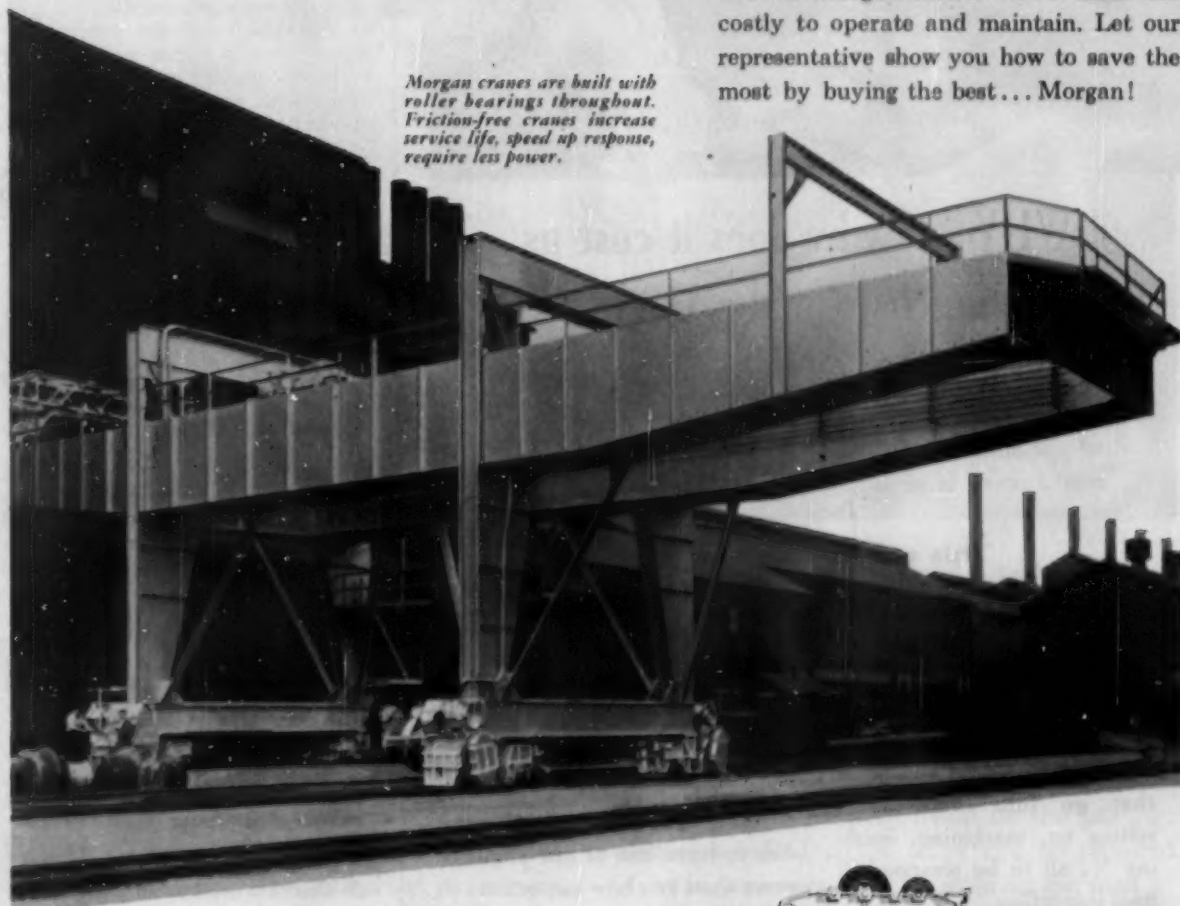
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wage plan, the Allis-Chalmers SUP program is "the new model that will form the basis for negotiations in the immediate future—until an even more advanced model emerges."

Point by point, the Allis-Chalmers plan is better for the union than Ford's. For instance, it provides 65% of normal take-home pay for the full 26-week period over which benefits may be paid; the Ford plan provides 65% for four weeks, then 60% for the remaining weeks.

- When a worker exhausts his state unemployment benefits (in some states they run only 16 weeks), he will still receive 65% of his take-home pay for the remaining period of his layoff, up to 26 weeks. Under the Ford plan, he will receive only the difference between either 65% or 60% of take-home pay and the weekly UC benefit he has been receiving before state UC payments are exhausted.

- SUP benefits in the Allis-Chalmers plan have a dependency rider like those in many state unemployment compensation plans; the laid-off worker is assured 65% of normal take-home pay plus \$2 additional for each dependent up to four.

- If an Allis-Chalmers employee works less than full time, he gets a one-eighth point credit for each day worked, up to a maximum one-half credit toward the points on which SUP payments and their duration to workers are based. Under earlier plans, a worker gets no credits if employed fewer than 32 hours in a week. Moreover, the A-C worker who is employed for a short week is assured enough supplementary pay to bring his total earnings up to 65% of weekly take-home pay.

- The A-C plan is also more generous in regard to (1) the rate at which point credits can be accumulated, and (2) the benefits payable for any given number of credits.

- **One Failure**—In all, UAW claims 15 "advances" in the Allis-Chalmers contract. However, the union did not win one of its major objectives: independent eligibility rules under SUP plans. All contracts signed so far provide that if a worker isn't eligible for state unemployment compensation, he isn't eligible for private supplementary pay. The auto union wants SUP eligibility to be completely independent of state unemployment compensation laws and rules.

UAW would like to use the independent eligibility demand as a club to persuade employers that they can reduce their potential UC costs if they (1) press states to eliminate severe eligibility requirements, and (2) stop protesting a worker's right to unemployment compensation if he refuses an "unreasonable" job referral. **END**



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THE MARKETS



Bulls Throw Away the Book

Market analysts are marveling at the stamina of the six-year-old bull market as it rolls along toward levels that once seemed unattainable. The mythical "500 on the Dow-Jones" isn't mythical any more—it isn't even remote. It may be as close as next week, or even tomorrow.

While the analysts marvel, they puzzle, too. How high can it go; how long can it last? One market letter writer says, "This is not only a bull market, but also a bull-headed market." Another old-time Streeter notes, "This market is like a bad ball hitter in baseball—he does everything wrong, but his average stays up there."

The market just isn't acting according to the book.

• **Rail Rise**—Last week, for instance, the rail stocks finally rose above their June high, thus confirming the earlier high of the industrials. Was there a vigorous upward surge after this critical gap was breached? Not at all. The market vacillated, sidled, and finally oozed a few tenths of a percentage point upward, and then proceeded to have the blind staggers for four days, during which time the industrial average made no appreciable gains.

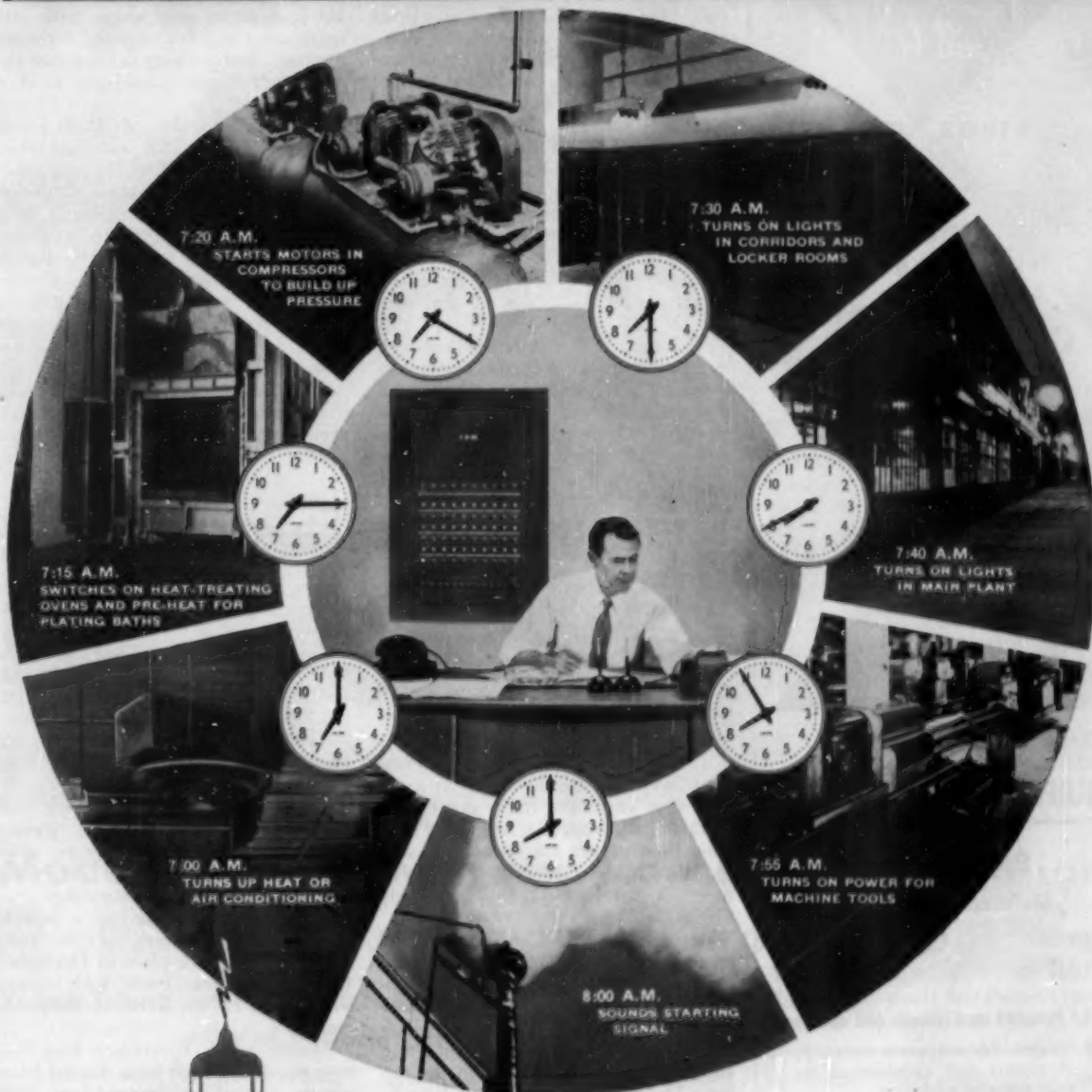
Commenting on the strange behavior of the rails in piercing their

previous high on the strength of a few issues, A. J. Cortese of Cortese, Kup-senel & Co., said what others had only whispered: "The thought has been expressed that the rises in the averages, especially the upside breakout in the rail average, are being deliberately maneuvered in order to give the appearance of strength and for the purpose of broad liquidation."

The selectivity that worries many analysts has become one of the bull market's outstanding characteristics. The statistics that confirm this feeling are turning up more frequently. Standard & Poor's index of 50 industrials has been bouncing along at a record clip on the strength of less than 15 issues (BW—Jul. 23 '55, p131). Wall Street's Francis I. duPont & Co. recently showed that while the Dow-Jones average had gained 125% since its 1946 high, only 16 of the 30 stocks in the average were 100% or more above that mark, and five issues were actually below their 1946 highs. But six blue chips were up over 250%, and they have provided the power.

• **Caution**—For the market as a whole, the pattern of cautious selection by investment trusts and individuals is even more striking than it is within the averages. Harold Clayton, of Hemphill,

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Noyes & Co., has shown that of 1,031 common issues on the Big Board, 74% have gained less than 20% since year-end, 1954, and 25% of the issues listed are actually below their yearend close. And even 50% of all issues listed are either below their yearend close, or have gained only 10% or less in the past eight and a half months. By contrast, Standard & Poor's combined average of 90 stocks (including rails and utilities) is up 25% since yearend. This average is dominated by blue chips, and the buying in those issues has given the appearance of a hefty gain, while actually 75% of all Big Board issues remain well back of the average.

This picture of a strong bull market, as reflected in the averages, plus spotty showings by a majority of all stocks is a prime source of worry to Streeters, especially when there is talk that institutions and individuals are sharpshoot-

ing at issues that weigh heavily in averages to make the market look stronger than it is. "Actually the market is in pretty good shape, with little speculation and fair volume," says one Streeter, "but priming the averages this way won't inspire confidence in it at these levels."

• **Yield Gap**—Adding to Wall Street's gray hairs is the ever narrowing gap between bond yields and stock yields, which crept another couple of notches closer together last week. Some of the firming of prices in municipal bonds is reported by market observers to have resulted when some institutional investors and wealthy individuals shifted from stocks to tax-exempts, where a high tax bracket investor can often find yields better than on high-grade equities. Yields on the 50 industrials index have shrunk to 3.55%, just slightly better than the year's low of 3.49%.

Shakeup in the Favorite Fifty

The last six months of the booming—with an occasional shudder—bull market have wrought some substantial changes in the holdings of investment trusts. This became evident last week when Wall Street's Vickers Bros. released its latest listing of the Favorite Fifty stocks held by the trusts.

The biggest switch in the list hits you right away: For the first time in more than four years, the funds don't have more dollars invested in Amerada Petroleum than in any other stock. A year ago, they held \$118.9-million worth of Amerada; last June 30, they held only \$102.4-million.

Replacing Amerada, mainly a crude oil producer, at the top of the list is another oil company, but one of an entirely different nature. The new leader is Standard Oil of New Jersey, which stood second on the list six months ago and has almost always been in the top five. The trusts have \$116.6-million in this company. Breathing on Standard Oil's neck is another corporate colossus, General Motors Corp., which the trusts hold to the tune of \$113-million. Six months ago, GM stood in sixth place, a year ago it was 10th.

• **In Blue Chips**—From the latest rankings, it's easy to see how the trusts have been playing the blue chip stocks for the last six months. Metals and oils show up especially strong in the listing. One eye-popper is Aluminum, Ltd., which stood 25th six months ago, with 47 trusts owning \$38-million worth of the stock. At the end of June, Aluminum had jumped to 16th, with 55 trusts holding \$62.8-million.

Other metals' shares of blue-chips

caliber fared nearly as well. Kennecott Copper edged up two notches to 16th, as dollar holdings increased from \$44.6-million in December, 1954, to \$53.1-million last June. U.S. Steel, which was 25th a year ago and 11th last December, ranked seventh in June. Its dollar holdings by trusts jumped from a yearend total of \$57.8-million to \$87-million in June.

• **Losing Ground**—While metals and oils were drawing favorable glances from the professional investors, utilities and a smattering of industrials dropped sharply in the standings.

Westinghouse, having trouble through the first part of the year, dropped from 12th place in December to 26th in June; trusts sold around \$13-million of its shares in those six months.

Middle South Utilities, a long-time favorite, disappeared from the list completely. United Gas dropped from 29th to 49th, as the trusts diminished their holdings of that stock by some \$4-million.

• **New Faces**—There were even new faces in the list as of June 30. The most spectacular showing by a newcomer was a jump from nowhere to 31st by Reynolds Metals, which recently announced a stock split. Reynolds' showing threatens to eclipse that of Sinclair Oil, which jumped to 40th place in its first appearance on the list last December and rose to 23 in June. Other newcomers were: Radio Corp. of America, Southern Ry., Aluminum Co. of America, Crown Zellerbach, Allied Chemical, and Cities Service. The last two have been in the list previously but were not on it at yearend.

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gines, pull 35' van type semi-trailers . . . a combination gross-train-weight rating of 60,000 pounds. They utilize the best components available. That's why the Fuller 5-A-65 Heavy-Duty Transmissions were chosen.

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Wall St. Talks . . .

. . . about Brainard's Aetna and McGinnis' New Haven . . . liquidity . . . underwriters' woes abroad.

Patrick B. McGinnis, president of the New York, New Haven & Hartford RR, last week felt a repercussion of the fierce 1954 proxy fight in which he unseated Frederic C. Dumaine, Jr. The New Haven, hard hit by flood damage from Hurricane Diane, is seeking a \$10-million loan from a group of insurance companies. One company, Aetna Life, isn't participating in the group, and gave no reason for bowing out after preliminary negotiations. Streeters were quick to note, however, that Aetna's president, Morgan B. Brainard, resigned from the New Haven's board last January, stating that he had "no confidence in the present management."

Liquidity preferred: "In this time of prosperity, it behooves us to make sure that we have adequate liquidity. . . ." This was the advice of the new Massachusetts State Commissioner of Banking, George P. Howard, to the states' savings bankers. Liquidity today means, says Howard, "short term governments, for you can always sell them at pretty near what you paid for them."

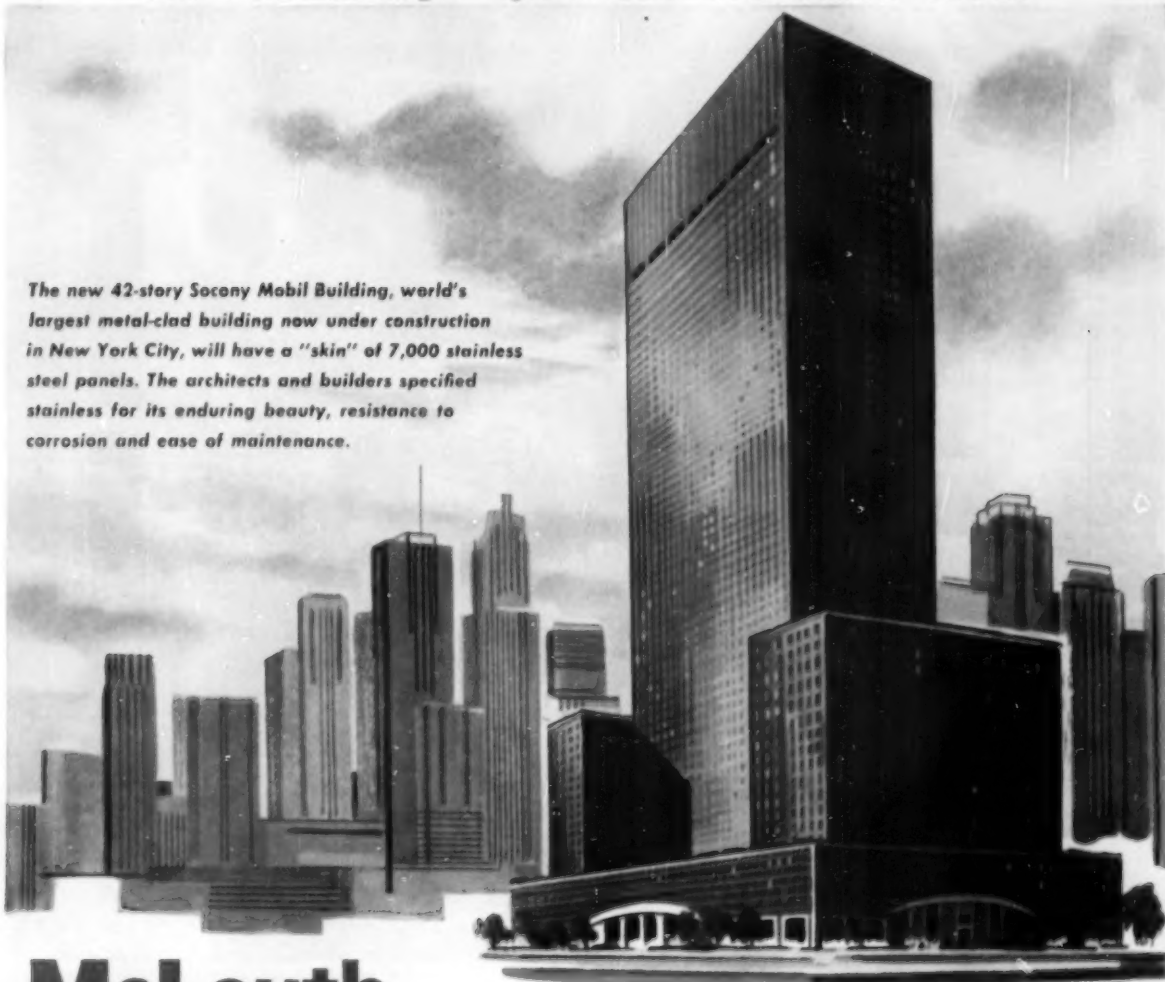
Underwriters are having a tough time on both sides of the Atlantic. At the same time that syndicates in Wall Street have been struggling with a sticky bond market, British underwriters have found themselves saddled with huge chunks of offerings that couldn't be sold to the public, even at heavy discounts. One notable example was a debenture issue of Allied Bakeries, which was offered to stockholders. The underwriters were stuck with 97% of the issue.

Everything's booming—including embezzlements: The American Banker reports that a survey of 53 banks shows record embezzlement losses—\$1.3-million for the first half of this year.

Reports that the Fulbright Committee will have another tilt at the stock market are unfounded—at least so far. Staff director Robert Wallace says the committee is currently studying phases of market activity such as insider trading, proxy fights, and over-the-counter securities. Wallace says, however, that the committee is always interested in dramatic stock price movements, and doesn't rule out more hearings after the first of next year.

modern design specifies stainless steel

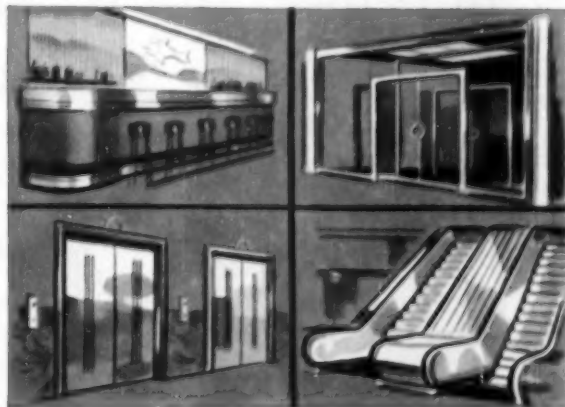
The new 42-story Socony Mobil Building, world's largest metal-clad building now under construction in New York City, will have a "skin" of 7,000 stainless steel panels. The architects and builders specified stainless for its enduring beauty, resistance to corrosion and ease of maintenance.



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PERSONAL BUSINESS

BUSINESS WEEK

SEPT. 24, 1955



The long waterfowl hunting season opens in some areas Oct. 1. From that date all the way through next Jan. 15, sportsmen will be able to hunt wild ducks, geese, coots, jacksnipe, and the like in one or another of the four flyways.

The shortest straight season is 70 days—in states in the Atlantic and Mississippi flyways. In the Central Flyway states, it's a 75-day season. And the Pacific Flyway will have 80 straight days. (Exception: California, which will have two seasons totaling 70 days.) Actual dates vary with individual states.

But even a long season leaves many waterfowl hunters without the Big Prize—a bag of geese.

To the man in the blind, geese usually present the same kind of challenge that uranium presents to the prospector. More wary, more sagacious, and more difficult to outwit than any other waterfowl, they pose a real test of the sportsman's skill and ingenuity.

So if you're planning to try your luck this fall, it's a good idea to brush up on some of the basic points that help increase your chances.

The fouler the weather, the better the goose hunting. Normally, in good weather, migrating geese fly so high that they are far out of range. On cloudy, windy, cold days, they tend to fly fairly close to the ground.

Regardless of the weather, best shooting hours of the day are around sunrise or sunset. These are the favorite times of day for feeding—and geese are very regular in their feeding habits; if not disturbed, they will return day after day to the same areas.

When you allow for the speed of flight, remember that geese fly only between 40 and 50 mph.—much slower than smaller birds.

Accuracy is a lot more important in shooting geese than ducks. Geese are so tough and strong that the only really sure kill is a head shot; you can fill their bodies with lead and still not bring them down.

Experts recommend a full choke, 12-gauge shotgun, with a heavy load of No. 4 or No. 6 shot (some prefer No. 2 shot). Heavy loads like this mean a heavier recoil; so be prepared for it.

Decoys you may have out for other waterfowl won't normally attract geese; put goose decoys out as well. They are now available in wood, hollow plastic, and cork. (The use of live decoys has been illegal for about 20 years.)

Concealment, of course, is highly important. The type you use depends largely on what flyway you hunt in. In the East, for example, it's most common to use a shore blind—the better hunting areas are generally along water.

In the Middle West, "pit" or field shooting is more common. This is simply a hole dug in the ground in a natural feeding area, such as a grain field. And if you're hunting in the snow-clad western mountains—along the Snake River, for example—use a white sheet to disguise yourself.

Not all species of geese are legal game in all flyways—for example, both the snow goose and the blue goose are illegal along the Atlantic Flyway.

PERSONAL BUSINESS (Continued)

BUSINESS WEEK
SEPT. 24, 1955

But the Canada Goose, the biggest and most sought after, is legal game in all flyways. Be sure you can identify him when you see him.

There's more satisfaction to successful goose hunting than the triumph of being able to bag a bird in the first place. Once you have shot a goose, you have a lot to show for it. Young geese weigh between seven and 10 pounds (a 12-lb. bird is a big one; but they have run to as much as 23 lb.). And he will have a wingspread of between five and six-and-a-half feet.

Finally, goose is such good eating that it is a gourmet's delight. To many, this alone makes the effort involved worth while.

—●—
You run the risk of having the face amount of a check raised if you fail to write it properly—and carefully. Make sure you are following this procedure, which banks recommend as a preventive:

In the space where you write the amount of the check in figures, use a fraction rather than a decimal point to show the number of cents. Thus instead of "\$168.55," write "\$168" followed by the fraction 55 over 100. If there are no cents, write the fraction 00 over 100.

Do the same thing on the line where the amount is spelled out—thus "One hundred sixty-eight," followed by the fraction 55 over 100. Also, be sure you start writing the amount as close as possible to the left-hand margin. Fill the empty space up to the word "dollars" with a line.

In some states, a check dated on a Sunday may not be negotiable or legal. To avoid any question, it's best to date it either Saturday or Monday. (You can write a check with no date. But someone must put in a date before it is negotiated.)

Don't endorse a check with just your name when sending it through the mails. Instead, use a "restrictive endorsement"—for example, if you are mailing it for deposit to your account, write, "for deposit only," then sign your name.

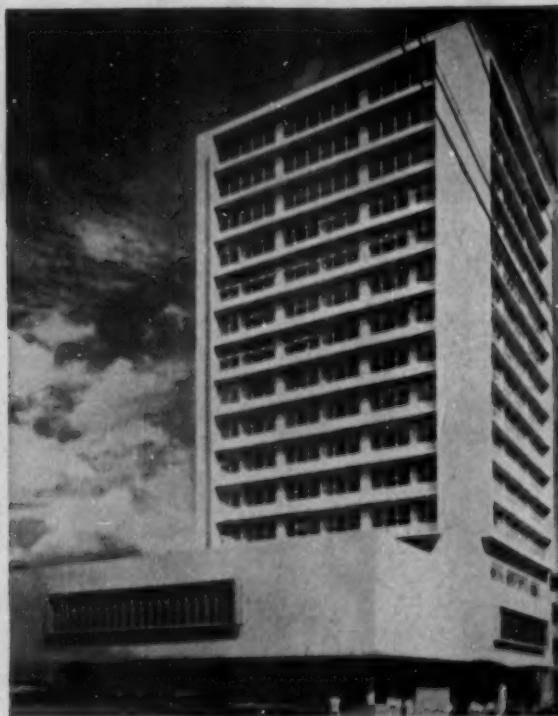
You can write any identification information on either the front or back of a check. Sometimes it's wise—it can help you prove that you have made a specific transaction.

—●—
Note for sports fans: Columbia's new record album, *The Greatest Moments in Sports*, contains a good number of highlights from sports events over the past 30 years. Featured are baseball, football (a Rockne pep talk is the highlight), racing, tennis.

—●—
Clorpactin, a new drug still under test, looks hopeful as an improved treatment of ear, nose, and throat infections. Studies show that it may be superior to antibiotics in effectiveness and lack of side-effects.

—●—
Manners and modes: Greater distance on drives and truer putting qualities are claimed for the new Colt golf ball, because it's made of one continuous strand of rubber. But its makers hasten to add that it won't correct your slice. . . . The "hero" sandwich, made from a whole loaf of Italian bread, is perfect food for resisting tooth decay, say two Columbia University dentists. . . . Electronic metal detectors have brought renewed popularity to the sport of hunting sunken treasure.

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See how completely the concrete work of the new Carlton Hotel, Tyler, Texas, has been weatherproofed and beautifully decorated with a "Plastispray" sheeting based on BAKELITE Vinyl Resins. Data courtesy of **Liquid Plastics Corporation**, (Progressive Industries, Inc.) Long Island City, N. Y.



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Church Yard



Lumber Yard



Junk Yard

Corsicana was the scene of the first oil boom in Texas. Now, 60 years later, the city is in the frenzied grip of a new boom. Oil wells have been drilled just about everywhere—from a church yard (left) to the back yard of the town's home for old people (extreme right). But this is no ordinary Texas boom. The oil isn't gushing; it's trickling.



Front Yard

New Kind of Oil Boom in Texas

The oil boom days have come back to Corsicana, Tex., where they started. Judging by the frenzied activity in this unpretentious town, you might expect to find a few gushers—but you won't. The oil is coming up in trickles. And the boom won't produce any new oil tycoons—not even a few pint-sized ones.

But these facts haven't stopped the oil fever from spreading through the little city of 20,000, which lies about 57 miles south of Dallas. It's claimed

that the eastern half of the town now has more oil wells per square foot than any place in America. Even Texas' first oil boom, in Corsicana, in 1895, or the more phenomenal Spindletop boom 200 miles away a decade later, didn't match the intensity of the present drilling.

• **Oil Wells Everywhere**—All you have to do is stroll through the eastern section of Corsicana to see how deeply the townspeople are seized with the oil

craze. You'll find wells in back yards, front yards—or just about any place. One grocer didn't have anywhere else to dig, so he had a well drilled right through the sidewalk in front of his store. Owners of a tourist court tore down one of their cabins to get space to sink a well.

In one short city block there are oil wells in front of three modest frame houses in a row.

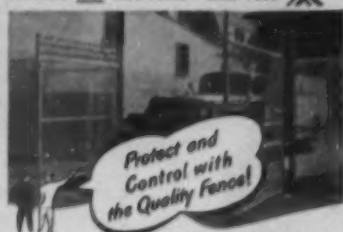
There's a well 10 ft. from the main



Back Yard

PAGE

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DRILLING GOES ON in Corsicana despite the low production from the wells.

entrance of a church and less than 4 ft. from the building. Another is in the backyard of a home for old people. And the hottest well in town is located amid the debris of a junk yard.

• **No Letup**—Within a five-month period some 350 wells have been drilled. And the drilling continues without letup. It's estimated that before the year is over the figure will reach 500.

But the fantastic thing about the boom is not so much the number of wells that have been drilled in such a short time as the low yield from each well. Right now average production of all the new wells is less than 9 bbl. of crude oil a day each. The "good" wells are producing about 30 bbl. a day. But many are averaging only 6 or 7 bbl. Monthly production from all the wells runs about 40,000 bbl.

• **The First Boom**—Corsicana's first boom 60 years ago came about by accident. Somebody was drilling for water and hit oil. The field reached its peak by 1900, with 373 wells producing 829,560 bbl. that year. After that production gradually tapered off. Many of the wells were abandoned; today a very few still are trickling.

Today's boom in Corsicana is no accident. It's the result of modern know-how in squeezing oil from sandstone formations with low porosity. The technique, called sand fracturing, consists of forcing a mixture of crude oil and sand into a "tight oil formation" under high pressure to permit trapped oil to flow out more easily—15 to 30 times more easily.

But there's a catch, and it doesn't seem to have registered too well in Corsicana. A well that's been sand fractured will be depleted 15 to 30 times as fast as one where the oil flows out of its own accord.

• **Diminishing Returns**—Any of the 350

wells that have been drilled in the past four or five months could have produced 1 to 14 bbl. a day by standard methods. Sand fracturing has pushed the yield way up. But after a month or so it begins to fall off. Take the production records of these wells chosen at random: Well A produced nothing in April, 293 bbl. in May, 128 bbl. in June, and 62 bbl. in July. Well B pumped 664 bbl. in April, 440 bbl. in May, and 207 bbl. in July.

Fewer than 10 wells during the whole boom have had to cut back production to comply with the Texas conservation law. The state sets no limits on wells producing 27 bbl. a day or less, but does regulate the flow of oil from wells yielding more than 27 bbl. And of the wells subject to production limits, none has pumped the total allowable for three months in succession.

Facts like these have convinced a few experts that an awful lot of people are going to get hurt by the boom.

• **Prophets of Gloom**—W. S. Guthrie, partner in the firm of Coffield & Guthrie, which gathers up crude oil from the different wells, and a part owner of 545 wells just outside of Corsicana proper, makes this comment on the boom: "I don't want any part of it. I am convinced that 90% of the people who have put money into this boom will never get their investments back. It's crazy." He describes the oil craze that has come over the townspeople as "something like playing a slot machine, they can't stop."

And Carleton D. Speed, Jr., prominent consulting geologist of Houston and son of one of the pioneers of the first Corsicana boom, summed it up this way: "There are so many straws in the Corsicana lemonade, what they get won't even pay for all the straws."

• **Too Many Wells**—The profusion of oil wells already is taking its toll. One early driller was doing very well for himself—his well was pumping 32 bbl. a day. But his next door neighbor decided to get into the act, too. So he sank a well about 25 ft. away. The result: two wells producing 16 bbl. each.

In another case, the "guy who was there first" fared even worse. The man next door decided to drill a well and sand fractured it when he got to pay sand. But the pressure was so great that it not only interfered with his neighbor's production, but blew sand out of his hole 200 ft. into the air and ruined the well.

But if the production of the wells is low, so is the cost of getting into the oil business in Corsicana. And this, no doubt, accounts for much of the intensity of the boom. It costs about \$6,000 to \$7,000 to get a well pumping. All of the wells are being found at depths ranging from 1,000 to 1,150 ft. The charge for drilling runs about \$1.00 to



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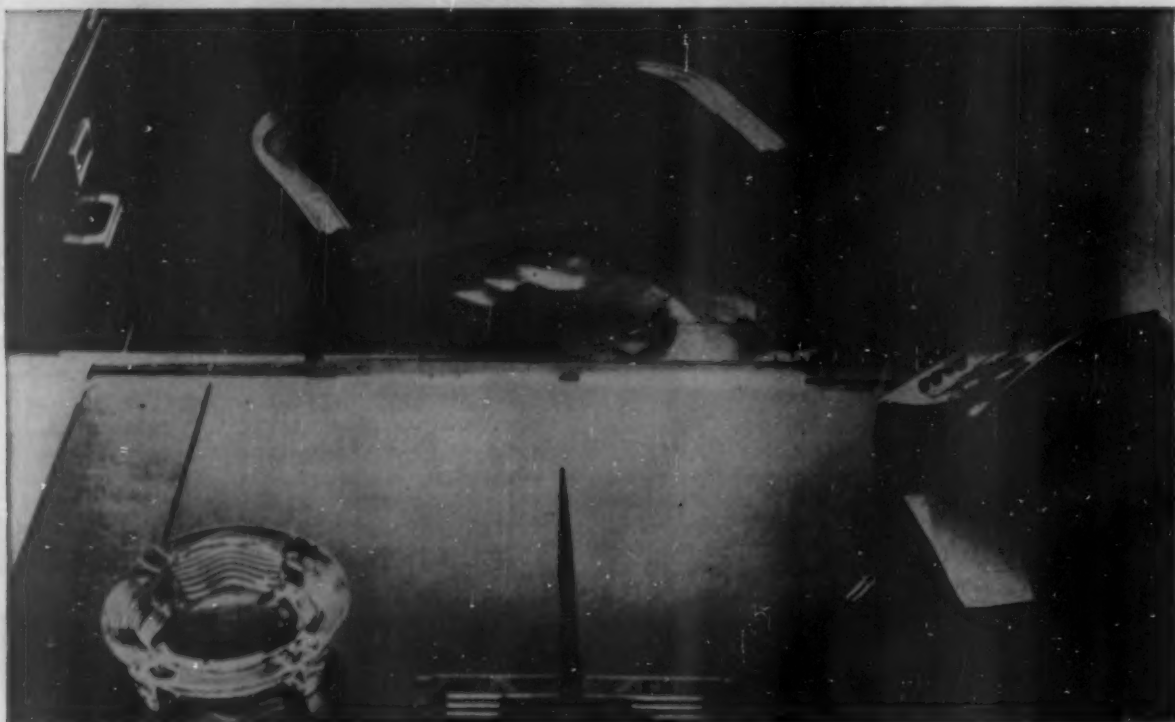
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\$1.25 a ft. The rest of the money goes to pay for casing, a pumping jack, a 2-hp. motor, a couple of 100-bbl. tanks, the cost of sand fracturing.

• **The Payoff**—The quality of the crude produced is quite good and brings \$2.85 a bbl. So even with average production of 8½ bbl. a day, the monthly take comes to \$684. And that looks big to a Corsicana oil man. What he overlooks is the fact that it will take 10 months of his gross income to break even, assuming his production does not decrease during that period. And it doesn't take into account the cost of operation or income taxes.

Often when production of a well starts falling off, it doesn't seem to occur to an operator that his fractured sand formation might be playing out. So he blames his equipment or thinks his well needs reaming—and throws more money down the hole.

Guthrie figures that "if a man doesn't get his money back in three months on this deal, he's on the slim end."

It's estimated that so far at least \$2-million has been invested in the boom. Very little of it has come from Corsicanans themselves. Most of it is being raised by promoters.

Some promoters got hold of six Corsicana wells at \$6,500 each and sold them to a little group of medical doctors in Alabama at \$16,000 each without the doctors even looking at the wells. When one of them did turn up in Corsicana, he didn't have enough information about the wells to find them in the jungle of Jensen pumps. It is rumored, though, he unloaded three of the wells to someone from Georgia for nearly the price paid for the six.

But about 1,000 Corsicanans have a direct stake in the boom as leaseholders and royalty owners. You get an idea of how badly they've been bitten by the oil bug when you realize that in some cases as many as 20 people are cut in on one-eighth royalty for one well.

• **City Rides Boom**—Though men like Speed and Guthrie deplore the economic waste of drilling wells on small, adjoining plots, Corsicana city officials are doing nothing to stop it. They are quite content to ride the boom, collecting \$25 per well for a permit fee. And word is around that by next year the city will collect another \$25 for something tentatively considered as an "inspection fee."

The way things look now the only people who are going to make money on the Corsicana oil boom are the drillers and the equipment suppliers. The lumber yards are making out well, too. A city ordinance requires that a fence be built around all wells and tanks.

But the deep-seated hope of striking it rich dies hard. And the drilling goes on. **END**

New Modernization Method Transforms Department Store



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**WHEN BUSINESS MEN WANT BUSINESS
NEWS THEY TURN TO BUSINESS WEEK**



Main Street Comes to Oak Ridge

In its first 12 years, the atomic city of Oak Ridge, Tenn., has had about as abnormal a municipal childhood as any community can. This week, as it contemplated its teens, it faced a future that was bound to be different.

Early next month, Oak Ridge will open the doors to the first privately

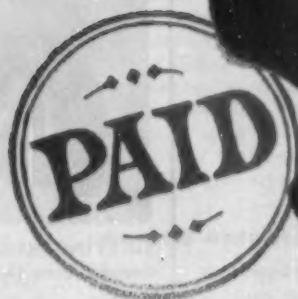
built commercial center in its history. At the same time, it will acquire a Main Street, something most cities have to start with.

Later—probably within the next five months or so—the federal government, which built Oak Ridge, will begin the process of selling off its homes and



Government-built houses are slated for sale to residents under new home-rule package. Owners of privately built homes (below) can buy their land now—not just lease it.





'\$3,500 for a spot on the new draperies...

The scene: A modern textile factory. Giant looms roar lustily, eating up miles of brilliant yarn, producing miles of beautiful new fabrics. In every loom, moving parts speed in a blur, faster than the eye can follow—and therein lies a story. For to lubricate those flying parts is a ticklish business.

On a single loom in a southern mill, for example, high speed gears overheated. The machine had to be stopped for lubrication, which was costly. But even worse, old-style lubrication resulted in stained fabric, no matter how careful the oiler was. Cost: Product spoilage over \$3,500.00 a year—on just one loom.

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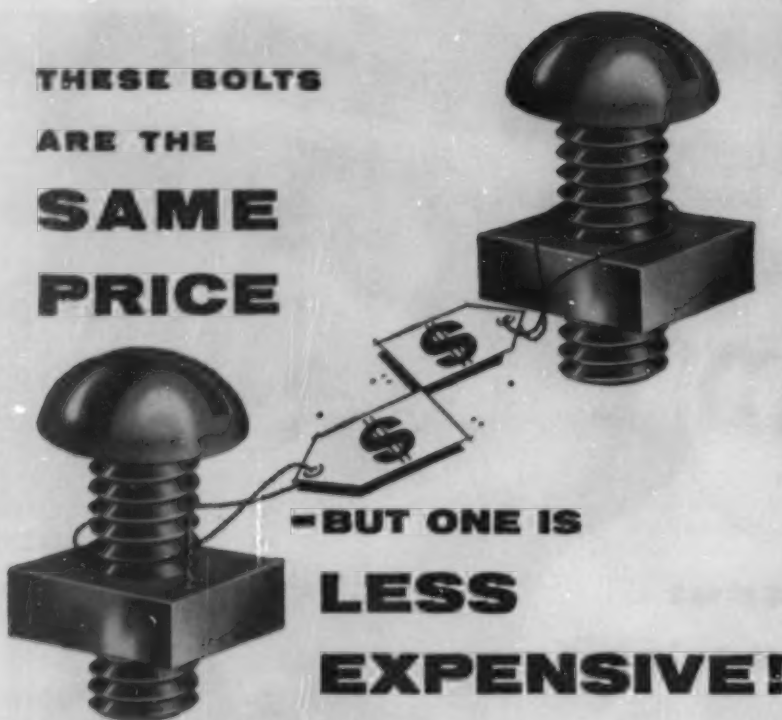
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GETTING READY for fall opening: 49 companies are Downtown tenants.

business properties to private owners. To complete the break, Washington will turn over the business of governing the city to the city itself. When that happens, the community of 31,000 people that the atom brought to the hill country north of Knoxville will have come about as close to normalcy as it's likely to get.

• **Atomic Downtown**—The commercial district that Oak Ridge plans to open on Oct. 6 is, in a way, a perfect example of its unconventional upbringing. Most cities start with a downtown nucleus, and the neighborhood shopping centers follow years later as the population spreads out. Oak Ridge has always had the shopping centers—built and owned by the government and leased to private operators. But it has never had a downtown, at least until now.

Although it hardly fits the traditional picture, the new commercial center that sprawls across 117 acres of the heart of Oak Ridge actually is named Downtown. Its principal street, encircling the 2,000-car parking area that sits in front of the stores, is Main Street.

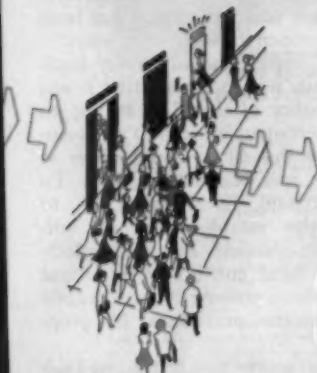
Built in two long rows that meet at a right angle, Downtown is the creation of Oak Ridge Properties, Inc., a company formed by Guilford Glazer, head of Glazer Steel Corp. in Knoxville. Glazer's company won a 50-year lease on the site last year after the Atomic Energy Commission had invited private capital to apply for the development job. Under the agreement, signed in April, 1954, the company is committed eventually to provide a minimum of 500,000 sq. ft. of commercial space.

By last week, 49 companies—among them the Great Atlantic & Pacific Tea Co.; J. C. Penney Co., Inc.; Walgreen Co.; Kroger Co.; and Esso Standard Oil Co.—were set to open Downtown with



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This is the Otis ELEVOICE that replaces the missing operator's voice in completely automatic AUTOTRONIC elevators. This voice will announce the floor at which the car has stopped, regardless of the number of floors between stops or the direction of travel. It will caution against delaying the operation of the door, but only when the door operation is being delayed. Too, it will suggest that entering passengers touch buttons for the floors they want and step back in the car. In department stores, the voice can announce the merchandise on sale at each floor, with daily changes. In office buildings, it can call out tenants' names. The voice can be that of a Bostonian, Atlantan, Chicagoan, or the dulcet tones of a well-known movie actress.



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Recently, a state legislature approved the use of operatorless elevators. In doing so it based its decision in part on these facts: That automatic operatorless elevators are more than twice as safe as manually operated elevators (long known to be the world's safest transportation); that better than 90% of the elevators now being installed are fully automatic; that the Federal Government itself is installing automatic elevators; that relatively few elevator operators will lose their employment; that most operators are persons who can readily obtain other employment; that automatic operatorless elevators represent the type of progress in our economy that cannot be stopped.



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An Otis escalator can open up normally inconvenient upper or lower floor space for a restaurant service area—and thereby release high-priced ground floor space for increased income! Escalators avoid any objections to stair climbing. A standard 32" Otis escalator provides ample carrying capacity. Its truss-enclosed machine eliminates a costly machine room. A three-section, factory-fabricated truss reduces installation costs. Otis planning engineers are ready to help you and your consultants. This service is free—without obligation.



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It's the Otis TRAV-O-LATOR—quickly described as an escalator that provides horizontal contour transportation. It can carry people up ramps in sports stadiums, schools and railroad stations; to and from parking areas; up from underground city traffic centers; or overhead across highways, or from airport terminal passenger levels down to airplane boarding points. There's practically no limit to the length, flexibility, or use of the Otis TRAV-O-LATOR described in Booklet A-415.

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"Otis Maintenance, which plays a major part in keeping our elevator service at peak performance, differs greatly from the offerings of elevator service companies," says James M. Bradford, Manager of the Dexter Horton Building in Seattle, and Floyd Clodfelter (at left) Chairman of the Board. "Otis Maintenance is 'engineered service' that has been designed to prevent trouble and breakdown, rather than just handle routine oiling and cleaning and the replacement of worn or broken parts after the equipment has failed. As a result, Otis Maintenance cannot be duplicated by any elevator owner, management company or other elevator company at any price."



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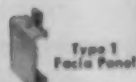


A striking treatment, with a "feature" area of panels in contrasting color. Architect: Leon Seligson, Columbus, Ohio.

A facade that will stay bright and clean without maintenance. Architects: A. G. Odell, Jr. and Associates, Charlotte, North Carolina.

A 6-page folder describing Davidson Architectural Porcelain will be sent on request.

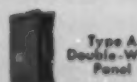
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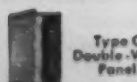
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as big a bang as possible. Ultimately, the idea is to add an office building, a children's nursery, a post office, and a Nuclear Industrial Exhibition Hall. All this, when combined with development of a bordering tract for "recreation and culture," will round out the community center that architects Skidmore, Owings & Merrill had in mind when they completed the master plan for Oak Ridge development in 1948.

• **Municipal Package**—Though Downtown has been a long time in coming, it has had nowhere near so slow a course as the home-ownership and self-rule law that Congress finally passed last summer. "Oak Ridge," as one government worker said last week, "has been pushing to open this door for years."

What Congress did in its dry legalisms last July was to declare that it was now the policy of the U.S. to put an end to government ownership and management of the AEC communities at Oak Ridge and Richland, Wash. To that end, it said, "it is desired... to facilitate the establishment of self-government; provide for the orderly transfer to local entities of municipal functions...; provide for the orderly sale to private purchasers of property..."

This was pretty much the package Oak Ridge had hoped for. AEC is now authorized to turn over to a local government, once it is set up, some \$35-million worth of municipal property. In addition, it can sell to residents \$42-million worth of homes and other private buildings. The price is to be based on Federal Housing Administration appraisals, a tagging process that is expected to start within the next few weeks.

Each occupant gets first crack at his own house. If he decides to buy, he can have 15% off the appraised price simply because he lives and works in Oak Ridge, then can knock off another 10% if he's willing to waive his rights to a government guarantee against loss. Any improvements that the occupant has made on the house are counted out at the start.

• **Timing**—At the moment, there is no telling exactly how long the turnover process is going to take. But the figuring is that at least some of it will get started shortly after the turn of the year.

The transfer of municipal facilities to a local government has to be made within five years, and AEC is authorized to spend any amounts "reasonably necessary" during that time toward helping the citizens set up for it. And for at least 10 years, the commission is pledged to make annual assistance payments to the new government based, in part, on what it might have to pay in taxes on atomic plants, if they were taxable. **END**

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In Regions

Politics Blamed in Detour

Of Bay State Highway Bill

BOSTON—Massachusetts' long-debated \$125-million highway bill is on the shelf until next year. And politics alone seems to have put it there.

No one really disputed the fact that the state needs more money to improve its roads. After the House passed the bill, observers felt it would be sheer folly for Democratic senators to try to block it. But that is exactly what they did.

Democrats maintained that all too many highway bonds, previously authorized, were still unused. Republicans answered by saying that had nothing to do with new improvements that were needed. But the Democrats remained unconvinced, and in two votes last week the bill went down to defeat, just missing the required two-thirds majority.

At this stage, political observers aren't sure which party gained the long-range advantage. Gov. Christian A. Herter, thoroughly peeved, said "the loser is the Commonwealth," and that the Democrats have to take full responsibility. But Democratic strategy looked smarter the deeper you probed. The party is now in a position to pass the bill in 1956, which is a gubernatorial election year. Boston observers say that would give the Democrats a hand in the "road game"—the rounding up of campaign funds from grateful contractors—when they could use it most.

Toledo Ball Club May Move;

Owners Seek TV-less Haven

TOLEDO—Despite a good year at the gate, 1955 may mark the end of the line for minor-league baseball here.

The Milwaukee Braves, owners of the Toledo Sox, want to shift their American Association franchise out of the city before another season comes around. The Braves say they have dropped \$250,000 on the operation over the last two years—even though the club placed third in league attendance this year.

Milwaukee hasn't said yet where it wants to shift the team. But its specifications for a site point up much of what's wrong with minor league baseball: It wants a city without expressway links to a major-league center, and one that is beyond the range of major-league telecasts. Any transfer will have to have the O.K. of the American Association.

Regions Briefs

The Missouri Basin is back where it started in trying to work out a plan for controlling the operations of its river-development projects. First, the valley turned down a TVA-type authority. Now the governors have scrapped a long-hashed-over compact proposal as impractical.

Searing drought in parts of Nebraska, Kansas, Oklahoma, and Iowa is taking a heavy toll of crops. Latest forecast for Nebraska indicates over 50% of its corn has withered since July.

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New Strength Behind the Boom

A new element of strength has been added to our already vigorous boom. Capital spending by business, which has lagged behind other sectors of the economy in the early stages of the boom, is now hitting new peaks (BW—Sep. 17 '55, p28).

The latest survey made by the Commerce Dept. and the Securities & Exchange Commission estimates that spending for new plant and equipment will hit an annual rate of \$29-billion in the third quarter and will reach \$29.7-billion in the fourth quarter.

These record-breaking figures mean that there will be no danger of a sudden decline in economic activity. They are a powerful offset against any drop in auto production or housing. The capital spending cycle is not a volatile short-term element—it may run as long as three years—so the present upsurge should be a factor of strength next year.

Most categories of business are taking part in the rise, particularly durable goods, railroads, commercial firms, and utilities. And the estimate for fourth-quarter expenditures may be exceeded by actual spending as increased competition leads more and more companies to revise their plans.

The fact is that businessmen are confident that growth is essential. Even though they have increased productive capacity 30% from 1950 to 1954, they are intent on more expansion.

Thus, capital spending is the great multiplier in our economy. The increased production it provides is matched by increased employment, which results in a bigger demand for goods. Without increased capital goods expenditures to sustain it, the boom we have would inevitably peter out.

But the upsurge in spending, coming at a time when the economic engine is running full steam ahead, may be a source of strain. A capital goods boom will mean increased demand for credit, workers, and raw material. If there is no slowdown in other sectors, then the added pressure of an expanding capital goods market carries a threat of inflation.

This is the danger—in the short-run. But over the long haul, businessmen's plans to spend more assures a solid base for growth and prosperity.

Science in Forecasting

The cry from the left field bleachers, "Wait until next year," hits the miscalculating businessman as witheringly as it does the Giants' Leo Durocher.

The question is not whether to look ahead but how to look ahead—by hunch or smell or by something resembling science. Increasingly, business decisions are becoming collective—particularly in big outfits. They reach farther and farther into the future. And too much dough rides on those decisions for any-

one to chance playing the future completely by ear. So business is turning to economic specialists for this forecasting.

That's the trend—and it's not happening because it's a fad but because increasing numbers of American firms find that scientific forecasting can make a valuable contribution to the development of sound secure production, marketing, and capital spending programs. We think it's a healthy trend, and one that's likely to contribute further to the stability and growth of business and of the nation's economy. The special report on economic forecasting in this issue (page 90) is intended to be a contribution in that direction.

Convertibility: Still Ahead

The annual meetings of the World Bank, held this year in Istanbul, always give central bankers from the nations of the free world an opportunity to do some stock-taking on convertibility. A year ago, the delegates decided that convertibility was no longer a pious hope but had become a practical problem. This year, the international banking community reported both progress and backsliding in its efforts to bring about free exchange of the world's currencies.

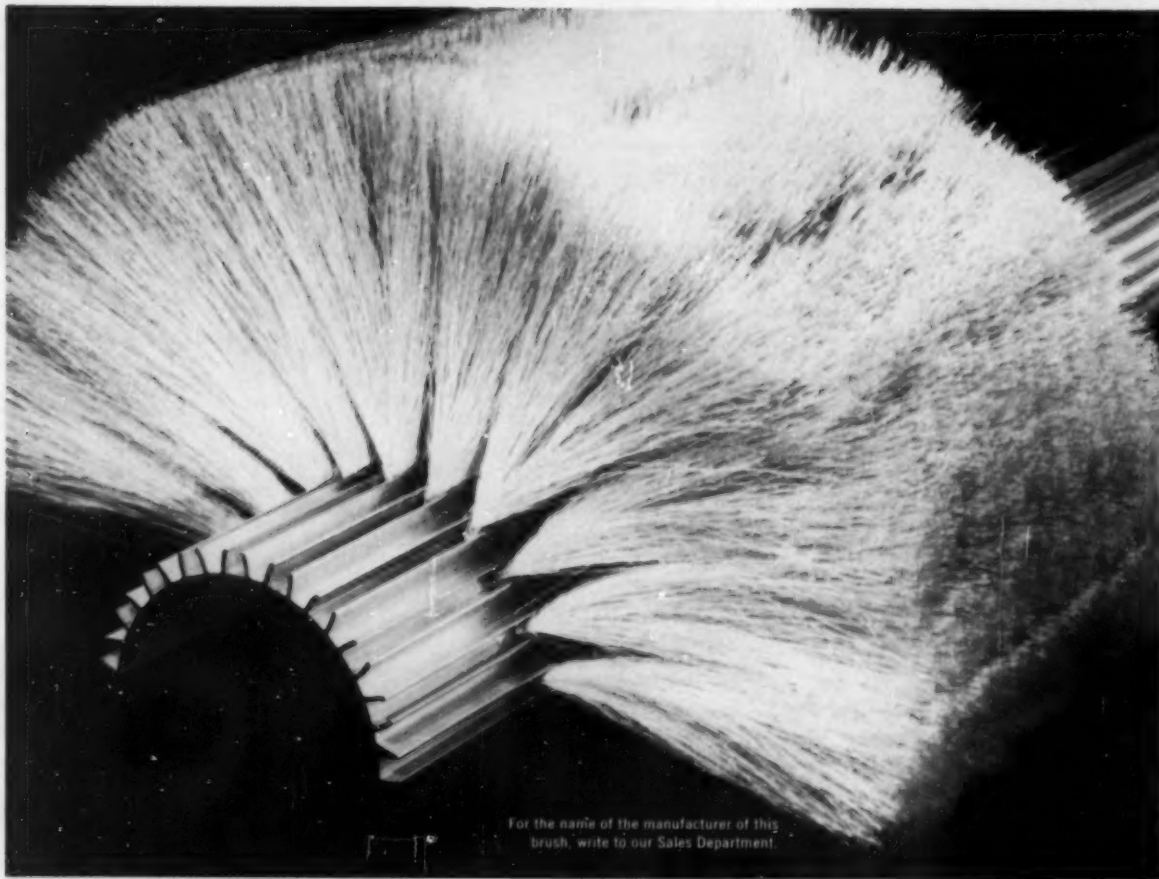
Real progress was made in raising living standards and production. There was progress, too, in the use of flexible and indirect monetary policies as the chief means of maintaining domestic stability. In most of Europe, these devices have supplanted reliance on direct government controls over credit.

In recent months, however, many countries have faced an outbreak of inflationary pressure. A combination of circumstances—labor and material shortages, heavy social security and defense expenditures, balance of trade difficulties—have led to a rise in prices.

In countries where productivity has increased faster than prices, such as Germany and Belgium, inflation has been held in check. But in countries where productivity has lagged behind the rise in the price level, as in Britain and the Scandinavian nations, domestic currencies have weakened—especially the pound sterling.

The weakening of sterling has indefinitely deferred the chances of full convertibility. This is in sharp contrast to a year ago, when the world was eagerly anticipating action by Britain. At Istanbul British Chancellor R. A. Butler not only postponed convertibility but heatedly denied that the pound would be devalued.

Delegates at the Istanbul meeting now recognize that convertibility, when it comes, will not be heralded by a single act or announcement. Rather, it will be a gradual process, dependent on the strengthening of productivity and competition abroad. And the closer we get to convertibility, the more problems it presents.



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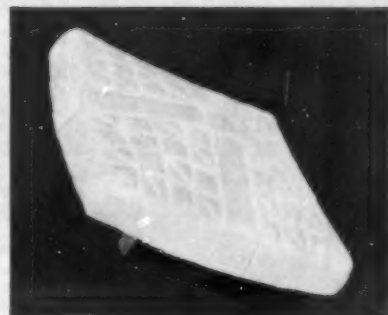
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